New Franklin School Traffic Circulation Improvements
Portsmouth, New Hampshire
MYRTLE AVENUE CUL-DE-SAC
APRIL 2016

PREPARED FOR: DEPARTMENT OF PUBLIC WORKS
CITY OF PORTSMOUTH
680 PEVERLY HILL ROAD
PORTSMOUTH, NH 03801

PREPARED BY: SEAPORT ENGINEERING, LLC
PORTSMOUTH, NH 03801
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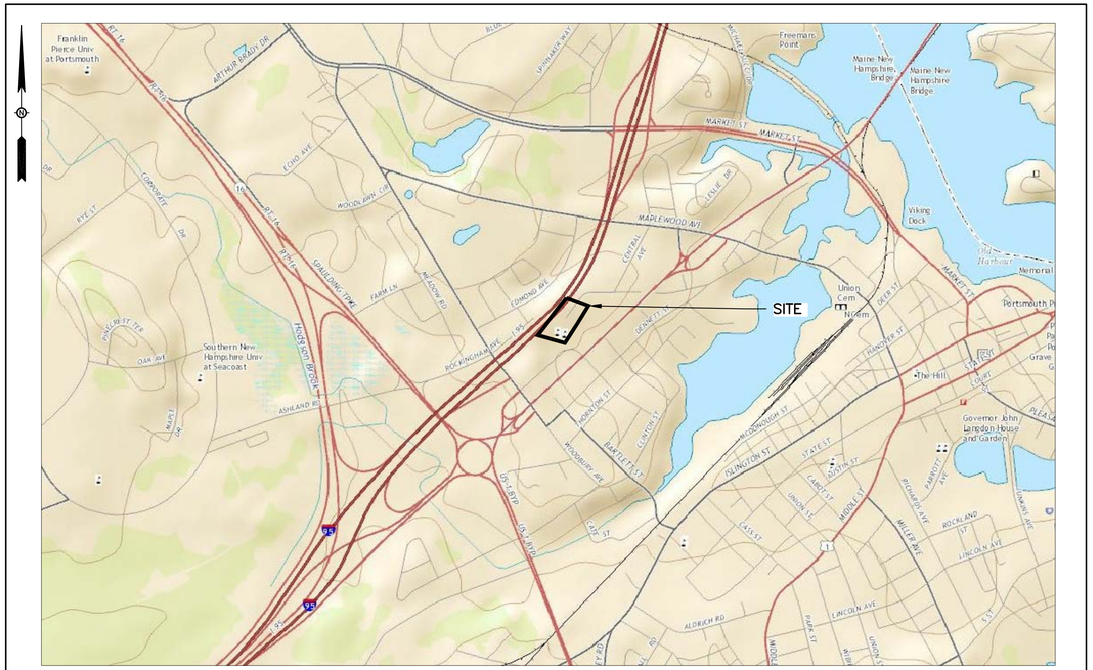
SURVEY BY: AMBIT ENGINEERING, INC.
200 GRIFFIN ROAD, UNIT 3
PORTSMOUTH, NH 03801



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75% PROGRESS
5/23/2016

SURVEY NOTES:
1. THESE PLANS ARE BASED ON A FIELD SURVEY CONDUCTED ON 4/26/2016 BY AMBIT ENGINEERING, INC.

DEMOLITION NOTES:
1. LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT GUARANTEED. CONTRACTOR SHALL LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR AND/OR RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK.
2. MATERIAL TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED. DISPOSAL SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.
3. ANY DAMAGE BY THE CONTRACTOR DURING DEMOLITION AND/OR CONSTRUCTION SHALL BE REPAIRS OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
4. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND FEES NECESSARY TO COMPLETE THE WORK.
5. CONTRACTOR SHALL REMOVE TREES AND BRUSH AS INDICATED AND AS REQUIRED FOR COMPLETION OF THE WORK. ALL STUBS SHALL BE REMOVED AND SURFACES GRUBBED WITHIN THE LIMITS OF WORK.
6. ALL WORK WITHIN THE PUBLIC RIGHT OF WAY SHALL BE COORDINATED WITH THE CITY OF PORTSMOUTH.
7. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CLEARING OR DEMOLITION WORK. THIS INCLUDES SILT FENCE / SILT SOCK AND INLET PROTECTION BARRIERS.
8. CONTRACTOR SHALL SAWCUT PAVEMENT AT EDGES OF TRENCHES FOR CLEAN VERTICAL EDGES.
9. PAVEMENT RECLAMATION LIMITS ARE SHOWN FOR CONTRACTOR'S CONVENIENCE. ADDITIONAL RECLAMATION MAY BE REQUIRED. CONTRACTOR TO VERIFY FULL LIMITS OF PAVEMENT RECLAMATION.
10. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, CONCRETE PADS, PAVEMENT, PIPES AND HEADWALLS WITHIN THE LIMITS OF CONSTRUCTION.
11. CONTRACTOR SHALL COORDINATE WITH ALL APPLICABLE PRIVATE AND PUBLIC UTILITIES.
12. CONTRACTOR SHALL NOTIFY DIG–SAFE 72 HOURS PRIOR TO ANY WORK STARTING. CONTRACTOR REQUIRED TO MAINTAIN AN ACTIVE DIG–SAFE PERMIT THROUGHOUT THE DURATION OF CONSTRUCTION.

GRADING NOTES:
1. CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CONTRACTOR SHALL PAY CLOSE ATTENTION TO DRIVEWAY ENTRANCES.
2. EXISTING MANHOLES AND CATCHBASINS WITHIN LIMITS OF CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADES.
3. ALL WATER SHUT OFF VALVES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADES.
4. CONTRACTOR SHALL CLEAN ALL STRUCTURES WITHIN THE CONSTRUCTION LIMITS IMMEDIATELY UPON COMPLETION OF THE WORK. ALL SEDIMENT AND DEBRIS SHALL BE DISPOSED OF PER FEDERAL, STATE AND LOCAL REGULATIONS.
5. STORM DRAIN PIPING, UNLESS OTHERWISE NOTED, SHALL BE HIGH DENSITY POLTYETHYLENE (HANCOR HI–Q, ADS N–12 OR APPROVED EQUAL).
6. PROPOSED CATCHBASINS SHALL BE EQUIPPED WITH OIL/WATER SEPARATOR HOODS AND 2' SUMPS.
7. ALL DISTURBED AREAS THAT ARE NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED FERTILIZER AND MULCH.
8. CONTRACTOR SHALL PROVIDE THE FOLLOWING MINIMUM REQUIREMENTS FOR COMPACTION:

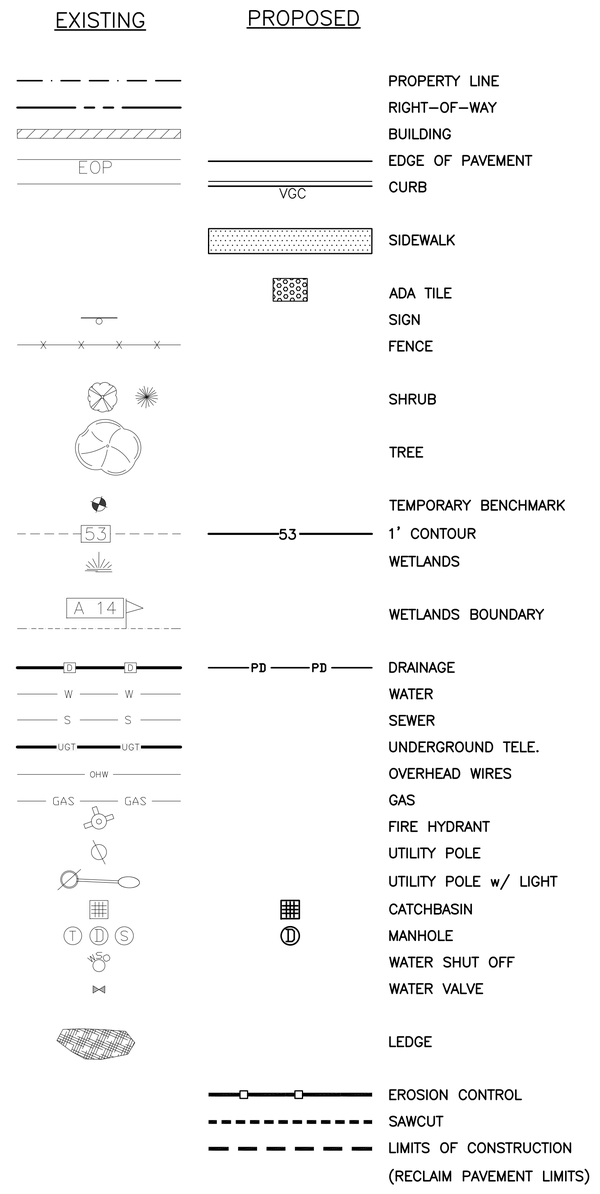
BELOW PAVEMENT AND CONCRETE AREAS	95%
TRENCH BEDDING AND BACKFILL	95%
BELOW LOAM AND SEED AREAS	90%

COMPACTION PERCENTAGES SHALL BE THE MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D–1557, METHOD C. FIELD DENSITY TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH ASTM D–1556 OR ASTM–2922.
9. STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) AND CITY OF PORTSMOUTH DPW STANDARD SPECIFICATIONS.
10. CONTRACTOR SHALL GRADE SLOPES TO THE LINES AND GRADES SHOWN ON THE PLANS. SLOPES STEEPER THAN 2:1 SHALL INCLUDE 6" RIP–RAP STONE. SLOPES FROM 4:1 TO 2:1, CONTRACTOR SHALL PROVIDE A SLOPE STABILIZATION BLANKET.

SITE NOTES:
1. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE SPECIFIED.
2. ALL WORK SHALL CONFORM TO THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS.
3. CONTRACTOR SHALL PROVIDE AS–BUILT PLANS (MYLAR AND .DWG FORMAT AUTOCAD FILES) TO THE CITY OF PORTSMOUTH UPON COMPLETION OF THE PROJECT. AS–BUILT SHALL BE PREPARED AND CERTIFIED BY A LAND SURVEYOR OR PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE.
4. MATERIALS AND CONSTRUCTION SHALL COMPLY TO ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND SPECIFICATIONS.
5. CONTRACTOR SHALL PROVIDE A LICENSED ENGINEER OR SURVEYOR TO DETERMINE ALL LINES AND GRADE.
6. CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL VERTICAL AN HORIZONTAL CONTROL FOR THE PROJECT.
7. PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE "MANUAL ON UNIFORM CONTROL DEVICES'. "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS".
8. CONTRACTOR SHALL SUBMIT A MAINTENANCE OF TRAFFIC PLAN TO THE CITY OF PORTSMOUTH FOR APPROVAL.
9. CONTRACTOR SHALL BE FAMILIAR WITH ALL AMERICAN WITH DISABILITY ACT (ADA) REQUIREMENTS FOR ACCESSIBILITY.
10. PAVEMENT MARKINGS SUCH AS CROSSWALKS, STOP BARS, LEGENDS AND SYMBOLD SHALL BE THERMOPLASTIC PER AASHTO M249. CENTERLINE AND EDGE STRIPING SHALL BE TRAFFIC PAINT PER AASHTO M248 TYPE 'F'. TRAFFIC PAINT COLOR AS INDICATED IN THE PLANS.

UTILITY NOTES:
1. CONTRACTOR SHALL IDENTIFY AND RECORD SWING TIES TO ALL EXISTING UTILITY STRUCTURES, INCLUDING, BUT NOT LIMITED TO WATER SHUT OFF VALVES, MANHOLES, FIRE HYDRANTS.
2. CONTRACTOR SHALL UTILITY WORK WITH THE APPROPRIATE UTILITY COMPANY.
   ELECTRIC – EVERSOURCE
   TELEPHONE – FAIRPOINT OR VERIZON
   WATER/SEWER – CITY OF PORTSMOUTH
3. LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT GUARANTEED. CONTRACTOR SHALL LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR AND/OR RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK.
4. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS, ARRANGE ALL INSPECTIONS, AND SUBMIT CERTIFICATES OF ACCEPTANCE TO THE OWNER PRIOR TO COMPLETION OF THE PROJECT.
5. CONTRACTOR SHALL NOTIFY DIG–SAFE 72 HOURS PRIOR TO ANY WORK STARTING. CONTRACTOR REQUIRED TO MAINTAIN AN ACTIVE DIG–SAFE PERMIT THROUGHOUT THE DURATION OF CONSTRUCTION.
6. CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, CATCHBASINS, FRAMES, GRATES & COVERS, AND OTHER MISCELLANEOUS ITEMS NOTE NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF THE UTILITY COMPLETE AND OPERATIONAL.
7. CONTRACTOR SHALL AS–BUILT PROPOSED STORM WATER DRAINAGE SYSTEM, TO INCLUDE ELEVATIONS OF RIM AND ALL INVERTS.
8. ALL HYDRANTS AND VALVES SHALL BE INSPECTED AND MUST MEET CITY OF PORTSMOUTH STANDARDS.

LEGEND:



NO.	DESCRIPTION	APP'D	DATE
B	PER DPW COMMENTS	MRB	5/23/16
A	75% PROGRESS SET	MRB	5/16/16

REVISIONS

DATE: MAY 16, 2016
SCALE: NONE
PROJECT NO.: CoP-004

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TITLE:
GENERAL NOTES AND LEGEND

G-1

MYRTLE AVENUE

NH HWY FND FLUSH BND

PROPOSED TREE LINE LIMITS (TRIM AS NEEDED)

ROADWAY TO BE RECLAIMED

LIMIT OF PAVEMENT RECLAIM

LIMIT OF BITUMINOUS CURB REMOVAL

LIMITS OF BITUMINOUS SIDEWALK REMOVAL

BITUMINOUS SIDEWALK TO BE REMOVED

EXISTING GATE TO REMAIN

LIMIT OF PAVEMENT RECLAIM

LIMIT OF BITUMINOUS CURB REMOVAL

CHAINLINK FENCE TO BE REMOVED

BIKE RACK AND CONCRETE PAD TO BE REMOVED

LIMITS OF BITUMINOUS SIDEWALK REMOVAL

TENNIS COURTS

TREES AND STUMPS TO BE REMOVED (TYP. OF 10)

GRAPHIC SCALE

10 5 0 10 20 30 40 FEET

3 0 5 10 METERS

NH STATE PLANE COORDINATE SYSTEM NAD 1983

NO.	DESCRIPTION	APP'D	DATE
D	PER DPW COMMENTS	MRB	5/23/16
C	75% PROGRESS SET	MRB	5/16/16
B	PER DPW COMMENTS	MRB	5/9/16
A	CONCEPTUAL LAYOUT	MRB	5/2/16

REVISIONS

DATE: MAY 2, 2016
SCALE: 1:10
PROJECT NO.: CoP-004

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TITLE:
EXISTING CONDITIONS AND DEMOLITION PLAN

C-1

MYRTLE AVENUE

NH HWY BND FND FLUSH

LIMIT OF PAVEMENT CONSTRUCTION (SAWCUT JOINT)

BEGIN VGC (TIE INTO EXISTING BITUMINOUS CURB)

5' TRANSITION (BITUMINOUS PATCH)

BEGIN CONCRETE SIDEWALK

5' WIDE CONCRETE SIDEWALK

LIMIT OF PAVEMENT CONSTRUCTION (SAWCUT JOINT)

END VGC (TIE INTO EXISTING BITUMINOUS CURB)

PROPOSED 10'x16' CONC. PAD WITH BIKE RACK

ADA RAMP WITH TRUNCATED DOME TILE (SEE DETAIL)

RAMP LANDING SLOPE 2.0% MAX. IN ALL DIRECTIONS

END CONCRETE SIDEWALK (MATCH TO EXISTING BITUMINOUS SIDEWALK)

3' TRANSITION (BITUMINOUS PATCH)

PCB1
RIM=42.60
INV OUT=37.36

PDMH1
RIM=42.25
INV IN(12")=37.00
INV IN(15"RCP)=36.54
INV OUT=36.44

36LF 12" ø HDPE
S=0.01

3'R

75'R

100'

VGC

TENNIS COURTS

GRAPHIC SCALE
10 5 0 10 20 30 40 FEET
3 0 5 10 METERS

NH STATE PLANE COORDINATE SYSTEM
NAD 1983

NO.	DESCRIPTION	APP'D	DATE
D	PER DPW COMMENTS	MRB	5/23/16
C	75% PROGRESS SET	MRB	5/16/16
B	PER DPW COMMENTS	MRB	5/9/16
A	CONCEPTUAL LAYOUT	MRB	5/2/16

REVISIONS

DATE: MAY 2, 2016
SCALE: 1:10
PROJECT NO.: CoP-004

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TITLE:
SITE, GRADING AND UTILITY PLAN

C-2

PROJECT NAME AND LOCATION:

MYRTLE AVENUE SCHOOL BUS CUL-DE-SAC
PORTSMOUTH, NEW HAMPSHIRE

DESCRIPTION:

THE PROJECT CONSISTS OF RECLAIMING THE EXISTING ASPHALT PAVEMENT SURFACE, REGRADING THE BASE MATERIALS AND RESURFACING. INCLUDES INSTALLATION OF DRAINAGE SYSTEM, CURBING AND SIDEWALKS.

CONSTRUCTION SEQUENCE:

1. INSTALL ALL EROSION CONTROL MEASURES.
2. REMOVE TREES AND VEGETATION.
3. INSTALLATION OF NEW STORMWATER DRAINAGE SYSTEM.
4. RECLAIM EXISTING ASPHALT PAVEMENT.
5. GRADE AND COMPACT BASE MATERIALS.
6. PLACE BASE COURSE OF ROADWAY PAVEMENT.
7. INSTALL NEW CURBING, SIDEWALKS AND PAD.
8. FINISH GRADE BEHIND CURB, SIDEWALKS AND PAD.
9. PLACE SEED AND MULCH ON LOAMED AREAS.
10. PLACE WEARING COURSE OF PAVEMENT.
11. WHEN CONSTRUCTION ACTIVITY IS COMPLETE AND SITE IS STABILIZED, REMOVE EROSION CONTROL MEASURES.

EROSION AND SEDIMENT CONTROLS AND STABILIZATION PRACTICES:

THE EROSION CONTROL PROCEDURES SHALL CONFORM TO SECTION 645 OF THE "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION" OF THE NHDOT, AND "STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE".

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.

AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

- BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
- A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
- A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
- EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION.

DUST CONTROL: IF TEMPORARY STABILIZATION PRACTICES, SUCH AS TEMPORARY VEGETATION AND MULCHING, DO NOT ADEQUATELY REDUCE DUST GENERATION, APPLICATION OF WATER OR CALCIUM CHLORIDE SHALL BE APPLIED IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES.

ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY DURING THE LIFE OF THE PROJECT AND AFTER EACH STORM OF 0.5" OR GREATER. ALL DAMAGED SILT FENCES SHALL BE REPAIRED. SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED IN A SECURED LOCATION.

AVOID THE USE OF FUTURE OPEN SPACES (LOAM AND SEED AREAS) WHEREVER POSSIBLE DURING CONSTRUCTION. CONSTRUCTION TRAFFIC SHALL USE THE ROADBEDS OF FUTURE ACCESS DRIVES AND PARKING AREAS.

TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNTS NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS. CONSTRUCT SILT FENCE AROUND TOPSOIL STOCKPILE.

ALL FILLS SHALL BE PLACED AND COMPACTED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.

DISTURBED AREAS SHALL BE SEEDED WITHIN 72 HOURS FOLLOWING FINISHED GRADING.

AT NO TIME SHALL ANY DISTURBED AREA REMAIN UNSTABILIZED FOR LONGER THAN 72 HOURS. ALL AREAS WHERE CONSTRUCTION IS NOT COMPLETE WITHIN THIRTY DAYS OF THE INITIAL DISTURBANCE SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION.

INSTALLATION PROCEDURES OF EROSION AND SEDIMENT CONTROLS:

A. VEGETATIVE PRACTICE

FOR PERMANENT MEASURES AND PLANTINGS FROM EARLY SPRING TO SEPTEMBER 30:

LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF 2 TONS PER ACRE.

FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 500 POUNDS PER ACRE OF 10-20-20 FERTILIZER.

SEED SHALL BE SOWN AT THE RATES SHOWN IN THE TABLE BELOW. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 1.5 TO 2 TONS PER ACRE, AND SHALL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE EROSION AND SEDIMENT CONTROL HANDBOOK.

THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED SHALL BE RESEEDED, AND ALL NOXIOUS WEEDS REMOVED.

A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE:

GENERAL COVER	SEEDING RATE
CREEPING RED FESCUE	100 LBS/ACRE
KENTUCKY BLUEGRASS	100 LBS/ACRE

SLOPE SEED (USED ON ALL SLOPES GREATER THAN OR EQUAL TO 3:1)

CREEPING RED FESCUE	20 LBS/ACRE
TALL FESCUE	20 LBS/ACRE
BIRDSFOOT TREFOIL	2 LBS/ACRE

IN NO CASE SHALL THE WEED CONTENT EXCEED ONE PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH APPLICABLE STATE AND FEDERAL SEED LAWS.

FOR TEMPORARY PROTECTION OF DISTURBED AREAS:
MULCHING AND SEEDING SHALL BE APPLIED AT THE FOLLOWING RATES:

PERENNIAL RYE: 0.7 LBS/1,000 S.F.
MULCH: 1.5 TONS/ACRE

B. MULCHING

IN ORDER TO BE EFFECTIVE, MULCHING MUST BE IN PLACE PRIOR TO MAJOR STORM EVENTS. THERE ARE TWO TYPES OF STANDARDS:
APPLY MULCH PRIOR TO ANY STORM EVENT:
THIS IS APPLICABLE WHEN WORKING WITHIN 100 FEET OF WETLANDS. IT WILL BE NECESSARY TO CLOSELY MONITOR WEATHER FORECASTS FOR ADEQUATE WARNING TO SIGNIFICANT STORMS.
REQUIRED MULCHING WITHIN SPECIFIED TIME PERIOD:
THE TIME PERIOD CAN RANGE FROM 14 TO 21 DAYS OF INACTIVITY IN AN AREA, THE LENGTH OF TIME VARYING WITH SITE CONDITIONS. JUDGEMENT SHALL BE USED TO EVALUATE THE INTERACTION OF SITE CONDITIONS AND THE POTENTIAL FOR IMPACT ON ADJACENT AREAS TO CHOOSE AN APPROPRIATE TIME RESTRICTION.
WHEN MULCH IS TO BE APPLIED TO PROVIDE PROTECTION OVER WINTER MONTHS, IT SHALL BE AT A RATE OF 6,000 POUNDS OF HAY OR STRAW PER ACRE. A TACKIFIER SHALL BE ADDED TO THE MULCH.

C. WINTER NOTES

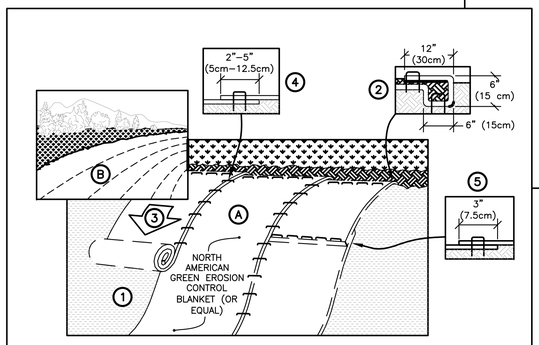
ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.

ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.

AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.

MAINTENANCE AND PROTECTION:

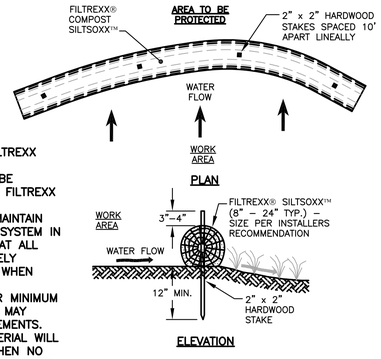
1. THE CONTRACTOR SHALL MAINTAIN ALL LOAM & SEED AREAS UNTIL FINAL ACCEPTANCE AT THE COMPLETION OF THE CONTRACT. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, REMOVAL OF STONES AND OTHER FOREIGN OBJECTS OVER 1/2 INCHES IN DIAMETER WHICH MAY APPEAR AND THE FIRST TWO (2) CUTTINGS OF GRASS NO CLOSER THEN TEN (10) DAYS APART. THE FIRST CUTTING SHALL BE ACCOMPLISHED WHEN THE GRASS IS FROM 2 1/2 TO 3 INCHES HIGH. ALL BARE AND DEAD SPOTS WHICH BECOME APPARENT SHALL BE PROPERLY PREPARED, LIMED AND FERTILIZED, AND RESEEDED BY THE CONTRACTOR AT HIS EXPENSE AS MANY TIMES AS NECESSARY TO SECURE GOOD GROWTH. THE ENTIRE AREA SHALL BE MAINTAINED, WATERED AND CUT UNTIL ACCEPTANCE OF THE LAWN BY THE OWNER'S REPRESENTATIVE.
2. THE CONTRACTOR SHALL TAKE WHATEVER MEASURES ARE NECESSARY TO PROTECT THE GRASS WHILE IT IS DEVELOPING.
3. TO BE ACCEPTABLE, SEEDED AREAS SHALL CONSIST OF A UNIFORM STAND OF AT LEAST 90 PERCENT ESTABLISHED PERMANENT GRASS SPECIES, WITH UNIFORM COUNT OF AT LEAST 100 PLANTS PER SQUARE FOOT.
4. SEEDED AREAS WILL BE FERTILIZED AND RESEEDED AS NECESSARY TO INSURE VEGETATIVE ESTABLISHMENT.
5. THE SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY UNTIL ADEQUATE VEGETATION IS ESTABLISHED.
6. THE SILT FENCE BARRIER SHALL BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
7. SILT FENCING SHALL BE REMOVED ONCE VEGETATION IS ESTABLISHED, AND DISTURBED AREAS RESULTING FROM SILT FENCE REMOVAL SHALL BE PERMANENTLY SEEDED.



NOTES:
1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECEP'S IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP'S.
3. ROLL THE RECP'S (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM™, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON RECP'S TYPE.
5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP'S WIDTH.

NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTH GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

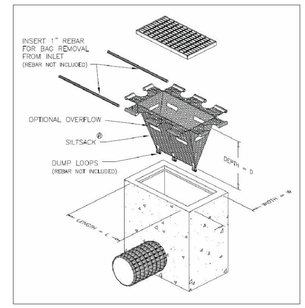
SLOPE STABILIZATION BLANKET
SCALE: N.T.S



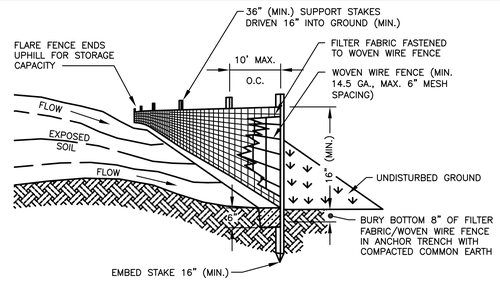
NOTES:
1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. FILLTREXX SYSTEM SHALL BE INSTALLED BY A CERTIFIED FILTREXX INSTALLER.
3. THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTRATION SYSTEM IN A FUNCTIONAL CONDITION AT ALL TIMES. IT WILL BE ROUTINELY INSPECTED AND REPAIRED WHEN REQUIRED.
4. SILTSOXX DEPICTED IS FOR MINIMUM SLOPES, GREATER SLOPES MAY REQUIRE ADDITIONAL PLACEMENTS.
5. THE COMPOST FILTER MATERIAL WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.

SEDMINETATION FENCE / LOG
SCALE: N.T.S

NOTES:
1. SILT SACK SHALL BE INSTALLED AT ALL EXISTING AND PROPOSED CATCH BASINS AND INLETS WITHIN THE LIMITS OF CONSTRUCTION SHOWN ON THE PLANS.
2. INSTALL AND MAINTAIN PER MANUFACTURERS REQUIREMENTS.



DRAINAGE INLET PROTECTION
SCALE: N.T.S



NOTES:
1. THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES, AS IN THE NEW HAMPSHIRE STORMWATER MANAGEMENT AND EROSION CONTROL HANDBOOK BEST MANAGEMENT PRACTICE FOR SILT FENCE.
2. THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 6 INCHES INTO THE GROUND AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC.
3. WOVEN WIRE FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES OR STAPLES.
4. FILTER CLOTH SHALL BE FASTENED SECURELY TO THE WOVEN WIRE FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP, MID-SECTION, AND BOTTOM.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 12 INCHES, FOLDED, AND STAPLED.
6. FENCE POSTS SHALL BE A MINIMUM OF 36 INCHES LONG AND DRIVEN A MINIMUM OF 16 INCHES INTO THE GROUND. WOOD POSTS SHALL BE OF SOUND QUALITY HARDWOOD AND SHALL HAVE A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES.
7. MAINTENANCE SHALL BE PERFORMED AS NEEDED TO PREVENT BULGES IN THE SILT FENCE DUE TO DEPOSITION OF SEDIMENT.
8. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
9. IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
10. SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
11. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY, AND VEGETATED.

SILT FENCE
SCALE: N.T.S

NO.	DESCRIPTION	APP'D	DATE
A	75% PROGRESS SET	MRB	5/16/16

REVISIONS

DATE: MAY 16, 2016
SCALE: VARIES
PROJECT NO.: CoP-004

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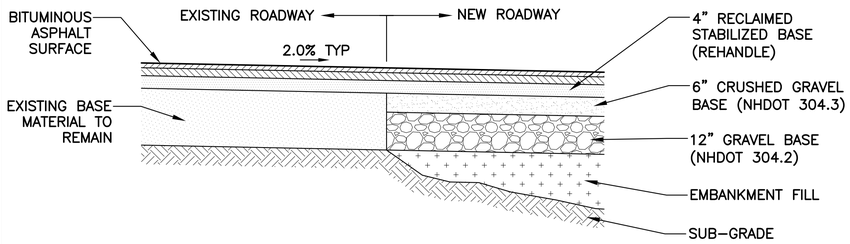
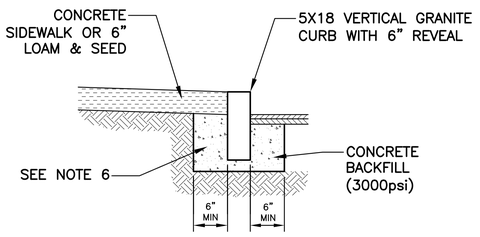
TITLE:
EROSION CONTROL NOTES AND DETAILS

E-1



NOTES:
1. SUPERPAVE SHALL BE:
   1.5" WEARING (3/8" 50 GYRATION)
   2.5" BINDER (3/4" 50 GYRATION)
2. RECLAIMED STABILIZED BASE SHALL COMPLY WITH NHDOT ITEM 306.
3. CONTRACTOR SHALL RECLAIM THE EXISTING ROADWAY TO A DEPTH OF 8". REHANDLE 4" OF RECLAIM MATERIAL TO NEW ROADWAY SIDE ABOVE BASE MATERIALS.

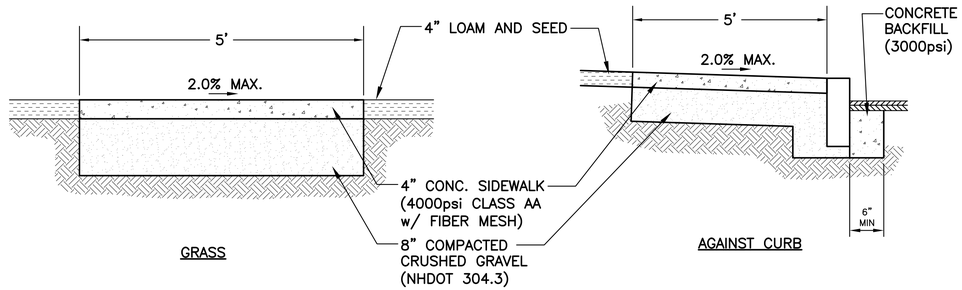
TYPICAL ROADWAY SECTION
SCALE: N.T.S

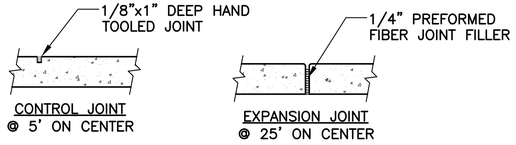


RADIUS	MAX. LENGTH USE CURVED CURB
<20'	3'
21'–25'	4'
26'–30'	5'
31'–35'	6'
36'–40'	7'
41'–50'	8'
51'–56'	9'
56'–60'	10'
OVER 60'	

NOTES:
1. CURB TO BE SET TO LINE AND GRADE SPECIFIED.
2. ALL RADII 20 FEET AND SMALLER SHALL USE CURVED SECTIONS.
3. CURB AT FLUSH SECTION OF SIDEWALK SHALL BE SET TO 1:48 (2.0% MAX.) SLOPE. CONTRACTOR TO VERIFY WITH SMART LEVEL.
4. VERTICAL GRANITE JOINTS SHALL BE MORTARED.
5. SEE CHART FOR MAX / MIN STONE LENGTHS.
6. AT LOCATIONS WHERE CURB IS AGAINST CONCRETE SIDEWALK, DO NOT PLACE CONCRETE CURB BACKFILL ON SIDEWALK SIDE OF CURB.

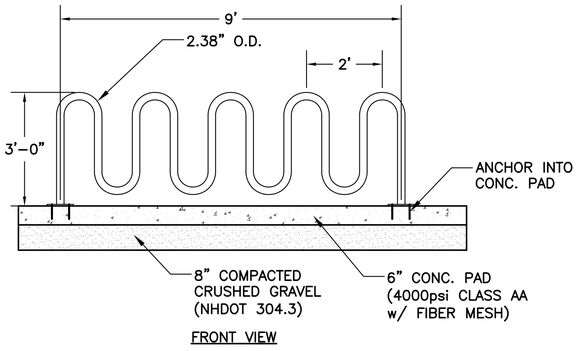
VERTICAL GRANITE CURB
SCALE: N.T.S





NOTES:
1. MEDIUM BROOM FINISH.
2. JOINTS SHALL BE HAND TOOLED w/ 1/8" RADII.
3. THERE SHALL BE NO CHANGE IN ELEVATION (LIP) OR GAPS IN THE SIDEWALK GREATER THAN 1/4".

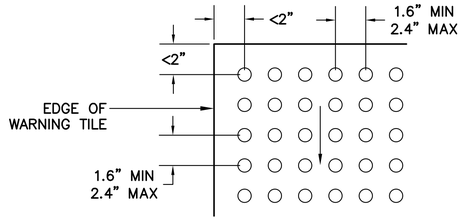
CONCRETE SIDEWALK
SCALE: N.T.S



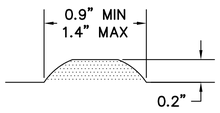
FRONT VIEW

NOTES:
1. PIPE SHALL BE EITHER HOT DIPPED GALVANIZED OR EPOXY COATED PAINT. COORDINATE WITH CITY OF PORTSMOUTH.
2. REFER TO MANUFACTURER REQUIREMENTS FOR ANCHOR BOLT SIZE AND TYPE.
3. CONCRETE SURFACE SHALL BE MEDIUM BROOM FINISH.

BIKE RACK AND CONCRETE PAD
SCALE: N.T.S



DETECTABLE WARNING TILE



DOME SECTION

NOTES:
1. TIP DOWN RAMPS SHALL HAVE A MAXIMUM SLOPE OF 8.3% FOR A DISTANCE OF 6'. IF RAMP IS GREATER THAN 6', A MAXIMUM SLOPE OF 5.0% ALLOWED.
2. MAXIMUM ALLOWABLE CROSS SLOPE IS 2.0% FOR SIDEWALK AND CURB.
6. THERE SHALL BE NO CHANGE IN ELEVATION (LIP) OR GAPS IN THE SIDEWALK RAMPS GREATER THAN 1/4".
7. AREAS OF CHANGE IN DIRECTION SHALL HAVE A MAXIMUM SLOPE OF 2.0% IN ALL DIRECTIONS.
8. DIAGONAL CURB RAMPS SHALL HAVE A FLAT (2.0% MAX.) LAND AT THE TOP AND BOTTOM.
9. ON RAMPS PERPENDICULAR WITH CURB LINE, PATTERN SHALL BE IN LINE WITH DIRECTION OF TRAVEL. RAMPS ON A RADIUS, PATTERN SHALL BE IN LINE WITH DIRECTION OF TRAVEL TO THE EXTENT POSSIBLE.
10. WARNING TILE SHALL BE PLACED SO THAT THE EDGE CLOSEST TO THE CURB IS BETWEEN 6"–8" FROM CURB LINE.
11. WARNING TILE SHALL SPAN THE FULL WIDTH OF THE RAMP AND A MINIMUM OF 24" DEEP.

SIDEWALK RAMPS
SCALE: N.T.S

NO.	DESCRIPTION	APP'D	DATE
A	75% PROGRESS SET	MRB	5/16/16
B	PER DPW COMMENTS	MRB	5/23/16

REVISIONS

DATE: MAY 16, 2016
SCALE: VARIES
PROJECT NO.: CoP-004

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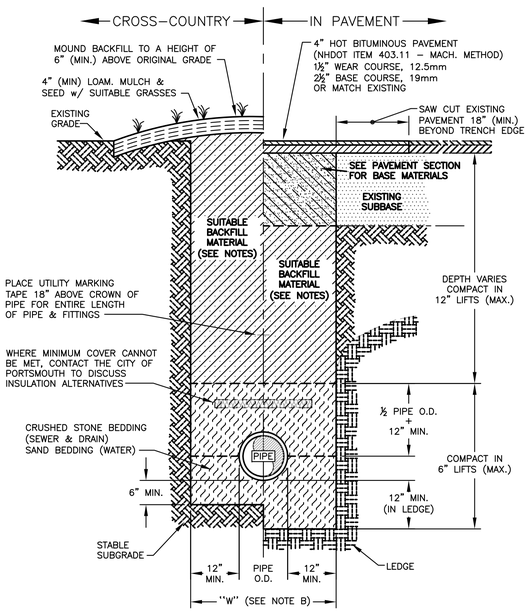
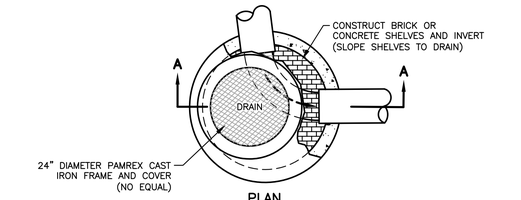
TITLE: DETAILS

D-1

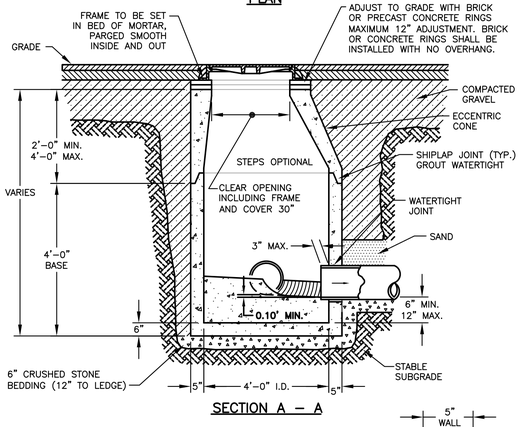


NOTES:
1. DRAIN PIPE SHALL HAVE CRUSHED STONE BEDDING FOR FULL WIDTH OF TRENCH UP TO 12" ABOVE TOP OF PIPE.
2. SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIALS DEEMED TO BE UNACCEPTABLE BY THE ENGINEER.

UTILITY TRENCH
SCALE: N.T.S

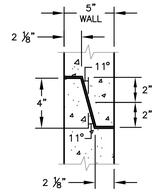


PLAN



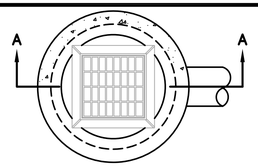
SECTION A – A

NOTES:
1. CONCRETE SHALL BE 4,000 P.S.I. AFTER 28 DAYS.
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ. IN. PER LINEAR FT. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT..
4. EACH CASTING TO HAVE LIFTING HOLES CAST IN.

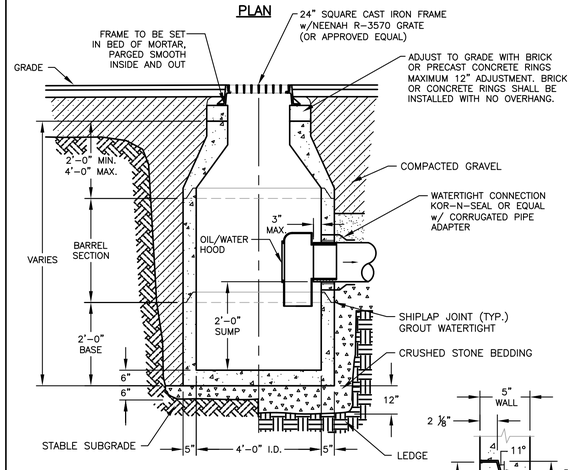


DETAIL OF SHIPLAP JOINT

DRAIN MANHOLE
SCALE: N.T.S

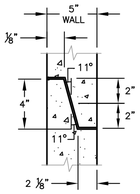


PLAN



SECTION A – A

NOTES:
1. CONCRETE SHALL BE 4,000 P.S.I. AFTER 28 DAYS.
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ. IN. PER LINEAR FT. IN ALL SECTIONS & SHALL BE PLACED IN THE CENTER THIRD OF WALL.
3. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
4. EACH CASTING TO HAVE LIFTING HOLES CAST IN.
5. ALL CATCHBASINS OUTLETS SHALL HAVE 'ELIMINATOR' OIL AND FLOATING DEBRIS TRAP BY KLEANSTREAM (NO EQUAL).



DETAIL OF SHIPLAP JOINT

CATCH BASIN
SCALE: N.T.S

NO.	DESCRIPTION	APP'D	DATE
A	ADDED SHEET		5/23/16

REVISIONS

DATE: MAY 23, 2016
SCALE: VARIES
PROJECT NO.: CoP-004

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TITLE: DETAILS

D-2