

FY '07 EQIP COST LIST NOTES - MASSACHUSETTS

Practice Code	Practice	Component	Unit	Notes
313	Waste Storage Facility	Stacking Facility	CF	<ul style="list-style-type: none"> • Cost per cubic feet of total (nominal) structure capacity • 3-sided concrete facility with concrete floor assumed. Includes all excavation, gravel, and earthfill for construction • 5 months storage used as average situation
		Concrete Liquid Storage	CF	<ul style="list-style-type: none"> • Cost per cubic feet of total (nominal) structure capacity • 4-sided concrete facility with concrete floor assumed. Includes all excavation, gravel, and earthfill for construction • 6 months storage used as average situation • Other associated practices not included (drainage for walls, fence, manure transfer components, seeding). Add these practices separately. • Add concrete pump separately for larger structures with restricted access
		Preapproved Structure, SlurryStore (relocated)	CF	<ul style="list-style-type: none"> • Cost per cubic feet of total (nominal) structure capacity • Used (approved relocated structure), with foundation, concrete floor, new stainless steel starter ring, side-mount pump. • Other associated practices not included (reception pit, manure transfer components (reception pit pump and pipe), seeding). Add these practices separately.
		Concrete Pump	HR	Includes all costs associated with hiring a concrete pump
		Roof	SF	Cost per square foot of footprint over waste storage facility
317	Compost Facility	Paving	SF	<ul style="list-style-type: none"> • Costs per square foot for concrete and gravel paving, which includes all excavation, fill, and geotextile when needed.
		Curbs	LF	<ul style="list-style-type: none"> • Curbs are priced separately, by the lineal foot.
		Roof	SF	<ul style="list-style-type: none"> • Roof cost per square foot of footprint over compost facility
350	Sediment Basin	Concrete Settling Facility	CF	<ul style="list-style-type: none"> • For Ag waste purpose • Used primarily for barnyard runoff to settle solids prior to discharge to treatment strip • Cost per cubic feet of total (nominal) structure capacity • Includes screen box and/or riser
356	Dike	Cranberry, mineral soils	LF	Cranberry dikes located over predominately mineral foundation soils, where little settlement is anticipated. Includes all work need to construct the dike. Add Critical Area Planting.
		Cranberry, organic soils	LF	Cranberry dikes on organic soils where significant settlement is expected.

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362	Diversion		LF	Includes all excavation and earthfill needed to construct the diversion. Does not include underground outlet and riser, if needed. Refer to Underground Outlet. Does not include subsurface drainage if required. Refer to Subsurface Drainage. Add Critical Area Planting.
366	Anaerobic Digester (Controlled Temp)	System size	EA	Projects will have feasibility study, reviewed to determine eligible costs prior to contract signing. Appropriate cost range to be selected for the project.
378	Pond	Excavation: Spread < 200' away Hauled > 200' & spread Hauled off-site	CY	Excavated ponds only (not embankment ponds) Costs per cubic yard of excavation. Choose the appropriate method of handling the spoil. Add Critical Area Planting
382	Fence	Fence type	LF	Includes all components for the different types of fence, installed. Gates priced separately.
412	Grassed Waterway	With seeding With stone center	LF	<ul style="list-style-type: none"> Includes grading and shaping, excavation and fill. Add Critical Area Planting. Does not include subsurface drainage if required. Refer to 606 for prices of tile drainage. Separate price is listed for stone center waterway. The stone center is to handle continuous low flows where vegetation cannot be established due to wetness. The price does not include larger rock for erosion control due to excess velocity, which would be handled under 468, Lined Waterway or Outlet.
430DD	Irrigation Water Conveyance	Cranberry, Main	AC	Cranberry systems: priced by the acre A system that will achieve the minimum 85% CU. Different cost share rates for systems that meet the minimum criteria for washoff time, and for those systems that meet the higher criteria for washoff time. Includes all materials and labor to install the mainline. Filters for cranberry irrigation systems are added as a separate component.
		Cranberry Main, Retrofit	LF	Item for Washoff time Retrofits for the purpose of reducing washoff times is eligible for systems not previously cost-shared under EQIP (1998-present). Prices for different sized mainlines brought into the bog to improve washoff times. Different cost share rates for meeting minimum vs. higher criteria for washoff time.
		Non-cranberry Mains	LF EA	Other (non-cranberry) systems based lengths of installed pipe. Thrust blocks included. Other components listed separately (hydrants, zee pipe, valves, etc.) Filters based on system flow rate.
436	Irrigation Storage Reservoir (Pit)	Excavation: Spread < 200' away Hauled > 200' & spread Hauled off-site	CY	Excavated irrigation pits only (not embankment ponds) Costs per cubic yard of excavation. Choose the appropriate method of handling the spoil. Add Critical Area Planting.

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441	Irrigation System, Microirrigation		AC	<ul style="list-style-type: none"> Conversion of irrigation system to improve system efficiency (water conservation). Mainlines, submains, filters, valves, manifolds, etc. covered under 430DD For durable laterals in the field (not disposable tape). Separate price for orchards and vegetables to account for crop spacing.
			SF	<ul style="list-style-type: none"> Priced by square foot of irrigated area for greenhouse irrigation conversion
442	Irrigation System, Sprinkler	Cranberry Systems	AC	<p><u>Cranberry systems</u>: priced by the acre Minimum criteria: CU ≥ 85%, DU ≥ 76%, SC ≤ 1.3, Min in/hr ≥ 0.095, Mean in/hr ≤ 0.25 Higher criteria: CU ≥ 87%, DU ≥ 78%, SC ≤ 1.2, Min in/hr ≥ 0.095, Mean in/hr ≤ 0.18 Prices include cost of the risers, heads, and nozzles. Head replacement and retrofitting heads & laterals require that the system meets the minimum criteria in the 442 standard plus minimum criteria for washoff time. Cost share only eligible for systems not previously cost-shared under EQIP (1998-present).</p>
		Non-Cranberry Systems	AC	<ul style="list-style-type: none"> For conversion to low-pressure center pivot or lateral move systems for improvement of irrigation system efficiency
			LF	<ul style="list-style-type: none"> Cost for renozzling existing center pivots or lateral move systems to low pressure nozzles.
443	Irrigation System, Surface & Sub-surface		SF	For Closed (zero-runoff) irrigation systems in greenhouses
447	Irrigation Tailwater Recovery		CY	<ul style="list-style-type: none"> For water quality and/or water quality benefits. Generally involves excavation of a new pond, or use of an existing area to store water for reuse. Prices include excavation on a cubic yard basis, up to the storage volume. <p>Lift pump – see Pumping plant</p>
468	Lined Waterway		LF	Includes grading and shaping, excavation and fill, delivery and installation of rock riprap, including bedding, and geotextile. This price is for rock riprap required to resist excess velocity, and not for stone center waterways, which are installed due to wetness. See 412, Grassed Waterways, for price for stone centered waterways.
516	Pipeline	Pipeline Valves & hydrant	LF EA	<ul style="list-style-type: none"> For livestock watering; prices for buried and unburied pipe Valves priced by type; frost free hydrant <p>See other practices for components making up a complete livestock watering system (pumping plant, spring development, watering facility)</p>
521	Pond Sealing or Lining		SF	One price for all types of lining. Used for water quality purposes, generally ag-waste related.

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533	Pumping Plant	Centrifugal & submersible plants Solar & Wind Lift Pumps	HP EA EA	<ul style="list-style-type: none"> Centrifugal pumping plants for irrigation and submersible pumps for wells (irrigation or livestock watering) priced by the HP (horsepower) Solar & Wind pumping plants for livestock watering priced for each complete system Lift pumps for cranberry tailwater recovery priced each (one price for all sizes) For manure and wastewater pumps, refer to Manure Transfer
558	Roof Runoff Structure	Gutters, downspouts, and French drains Drywell	LF EA	<ul style="list-style-type: none"> Prices per foot for Gutters and French drains <ul style="list-style-type: none"> For gutters, measure the roof edge distance for the length. The cost per foot includes the downspouts (do not add the length of the downspouts) The french drain price includes the perforated tubing within the gravel trench. One price for drywells. Refer to Underground Outlet practice for outlets for downspouts and french drains. Higher cost share rate for water quality purposes (clean water exclusion for animal waste)
560	Access Road		SF	<ul style="list-style-type: none"> Cost includes excavation, grading and shaping, geotextile when required, gravel fill for the surface, priced per square foot of road surface. Subsurface drain and critical area planting can be added as separate practices
561	Heavy Use Protection	Paving Curbs Concrete Buck Wall Roof	SF LF LF SF	<ul style="list-style-type: none"> Costs per square foot for concrete and gravel paving, which includes all excavation, fill, and geotextile when needed. Curbs are priced separately, by the lineal foot. See Wastewater Treatment Strip for the price of slotted curbs associated with barnyards. Concrete buck wall can be added, priced by lineal foot. Restricted to 10 ft of wall length. Roof cost per square foot of footprint over barnyard paving
574	Spring Development		EA	Costs for the development of the spring (spring box, collection pipe, etc). Refer to Pipeline for the pipe, hydrant, and drain valve, Watering Facility for the trough or tank, and Pumping Plant for pumps.
575	Animal Trails and Walkways		SF	<ul style="list-style-type: none"> Cost includes excavation, grading and shaping, geotextile when required, gravel fill for the surface, priced per square foot of trail surface. Subsurface drain and critical area planting can be added as separate practices Refer to Stream Crossing for fords, culverts and bridges in association with planned grazing systems.
578	Stream Crossing	Fords Culverts & Bridges	EA SF	<ul style="list-style-type: none"> Stream fords priced each, complete, including excavation, fill and armoring. See fence prices for the cross stream fencing and exclusion fence and gates, and Critical Area Planting for seeding. Costs for culverts and bridges priced by the square foot of the travel portion of the crossing, top of bank to top of bank.

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580	Streambank Protection		LF	All components based on linear feet of streambank protected. Add critical area planting.
582	Open Channel		LF	For cranberry by-pass channels. Priced per cubic yard of excavation and based on how the method to handle the spoil. See Structure for Water Control and Critical Area Planting for associated practices.
587	Structure for Water Control	Non-cranberry	EA	PVC structure for non-cranberry systems, typical size for water level control structure (for constructed wetland, for example)
		Cranberry Bogs	EA	<ul style="list-style-type: none"> Aluminum structures for Cranberry bogs, prices assume a 6 ft. riser, base plate, and side wings. Includes 20 ft of annular aluminum pipe. Includes installation.
			LF	<ul style="list-style-type: none"> Additional pipe, beyond 20 ft, priced per foot. Prices include band and installation.
600	Terrace Water & Sediment Control Basin	Terrace	LF	Includes all excavation and earthfill needed to construct the terrace or water & sediment control basin. Add critical area planting. Does not include underground outlet and riser. Refer to Underground Outlet. Does not include subsurface drainage if required. Refer to Subsurface Drainage.
638		Water & Sediment Control Basin	LF	
606	Subsurface Drainage	Drainage Tubing	LF	<ul style="list-style-type: none"> Prices listed are for all sizes (price for 6" assumed). Prices are listed for perforated PE tubing with a gravel trench, and perforated or non-perforated without a gravel trench. Non-perforated would be used to carry the drainage to an outlet. The prices include all material, installation, and seeding as required.
		Outlet Pipe	EA	<ul style="list-style-type: none"> Separate price for outlet pipe, which assumes 20 ft of PVC or metal pipe and an animal guard. <p>Refer to Underground Outlet for PE Tubing to outlet roof runoff, terraces, diversions, etc.</p>
614	Watering Facility		EA	Prices for permanent and portable facilities, installed. See pipeline, spring development, and pumping plant for associated practices.
620	Underground Outlet	Outlet tubing	LF	<ul style="list-style-type: none"> For outlets of roof runoff, terraces, water & sediment control structures. Non-perforated tile is normally used, unless field drainage is also needed. Gravel envelopes not normally used. Prices listed for 4 size ranges.
		Riser & Catch basin	EA	<ul style="list-style-type: none"> Perforated riser and catch basin prices listed, which includes installation
		Outlet Pipe	EA	<ul style="list-style-type: none"> Outlet pipes (various sizes), which include a flap-type animal guard and installation.

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634	Manure Transfer	Tanks and Pits	CF GAL	<ul style="list-style-type: none"> Cast-in-place reception pit priced per cubic foot of total (nominal) pit storage Precast tanks for septic, grease, dosing and reception pits priced per gallon of total storage
		Transfer pipe	LF	<ul style="list-style-type: none"> Large diameter pipe for gravity flow of manure & wastewater Smaller diameter pipe for pumped manure & wastewater. Separate price for 2" and for greater than 2" pipe.
		Pumps Flout or Siphon	HP EA	<ul style="list-style-type: none"> Manure & wastewater pumps priced per horsepower Price for Flout (floating outlet) and siphon for each device, installed. The tanks are priced separately.
		Pushoff ramp	EA	<ul style="list-style-type: none"> Pushoff ramp with safety rail, installed. Wisconsin Std Dwg 590 used for cost.
635	Waste Treatment Strip	Treatment strip	SF	<ul style="list-style-type: none"> Construction of treatment strip (topsoiling, grading and shaping) priced per square foot of strip.
		Manifold	LF	<ul style="list-style-type: none"> Distribution manifold pipe priced per foot of length (refer to Manure Transfer for the flout, pump, tanks, and wastewater transfer pipe to get the water to the manifold).
		Slotted curb	LF	<ul style="list-style-type: none"> Slotted curb priced separately from the barnyard paving (heavy use area)
		Gravel trench	LF	<ul style="list-style-type: none"> Gravel trench price for intermediate cross-trenches in the strip, if needed.
642	Well	Well	EA	<ul style="list-style-type: none"> One cost for all types of wells
		Well yield test	EA	<ul style="list-style-type: none"> One price for well yield test, authorized for new or existing wells to determine design yield and drawdown
656	Constructed Wetland		SF	<ul style="list-style-type: none"> Costs for construction of the wetland cells and dikes around and within them. Includes topsoiling and earthmoving. <p>All other components are priced separately (see Pond Sealing, Structure for Water Control, Critical Area Planting, Manure Transfer, etc) for necessary associated practices.</p>
702	Agrichemical Mixing Facility	Pad & all components	SF	<ul style="list-style-type: none"> Price per square foot of pad, which includes all components, except for the roof. Includes concrete, curbs, sump, wastewater pump, rinsate tanks and all safety devices.
		Roof	SF	<ul style="list-style-type: none"> Roof priced per square foot of footprint (price for 702 is higher than for 313 or 317 due to the smaller roof footprints for mixing facilities. Small roofs are generally costlier per square foot.)