

APPENDIX C: Cost Sharing for Flood Mitigation Work and Compatibility Work

The Project Partner Agencies have funded the engineering, design and permitting costs associated with golf course mitigation work as part of overall required mitigation planning for the Project. To date, design and permitting costs related to the golf course mitigation work exceed \$450,000. This work has generated permit level design plans to elevate the low golf course holes, and provide compatible renovation of the upland golf course holes and related features (as set forth in Cape Cod Commission DRI Application Appendix 8.H, attached hereto as Appendix D).

Under this agreement, the costs of constructing the golf course in accordance with Flood Mitigation Work and Compatibility Work will be shared among the parties as follows. These costs do not apply if the Contingency Plan must be implemented.

1. Flood Mitigation and Compatibility Work Cost.

Based on the above referenced golf course design plans, the design and engineering team of ESS and Maurer Associates estimates the total cost of constructing the proposed golf course renovation is \$5.1 million (2019 dollars). Costs are detailed on the spreadsheet incorporated into this Appendix titled, *CYCC Golf Course Construction Budget and Cost Allocation – 040820*. Assuming a 2022 construction start, 2019 costs are escalated at 4% per year for an adjusted cost of \$5.7 million. This assumes that the work would be bid as a private project.

2. Business Shutdown Costs.

Project funding will reimburse CYCC for any documented net operating loss incurred during golf course construction activity (the “Business Shutdown Costs”). The Business Shutdown Costs are estimated to be \$975,000 based on a financial model prepared by an independent third party expert, and to be updated with 2019 financial data to be provided by CYCC within thirty (30) days of the Effective Date of this Agreement and the results validated by both parties within thirty (30) days thereafter. The obligation to reimburse CYCC for Business Shutdown Costs is dependent on the ability of Project Partner Agencies to obtain grant funding for this purpose and on the ability of CYCC to provide documentation on costs as specified under this agreement.

3. Total Cost.

The total cost of the Flood Mitigation and Compatibility Work, plus Business Shutdown Costs, is estimated at \$6.7 million. (\$ 5.7 million + \$975,000 = \$6.7 million). This represents the total amount of funding the Town will seek for CYCC in this scenario. The Project bears 71% of total construction costs, or \$3.6 million (2019 dollars) adjusted to \$4 million (2022 dollars). CYCC assumes 29% of total construction costs, or \$1.4 million (2019 dollars) adjusted to \$1.6 million (2022 dollars), as set forth in *CYCC Golf Course Construction Budget and Cost Allocation – 040820*.

4. Flood Mitigation Cost.

Subject to the availability of grant funding, the Town will seek \$4 million (2022) of the construction costs related to the golf course renovation work, as set forth in *CYCC Golf Course Construction Budget and Cost Allocation – 040820*.

5. Compatibility Cost and Cost of Fill.

The Parties will share the cost of the Mitigation and Compatibility Work as set forth in *CYCC Golf Course Construction Budget and Cost Allocation – 040820*. CYCC will contribute fill excavated from its property on the terms set forth in Section 5(b)(iv) of this Agreement. The fill excavated from CYCC property will be credited against the Club's cost obligation, as set forth in paragraph 3, as follows:

- **Fill for Offsite Work.** The Project requires up to 70,000 cyds for fill to elevate low roads outside of the CYCC Property. If not provided by CYCC, this fill would need to be purchased from another offsite source. The Project bears the cost of excavating and transporting the fill. The Project assigns a credit equal to 100% of the material value for 70,000 cyd of fill needed for offsite work. The material value of the fill in 2020 is \$10 per cyd, or \$11 per cyd in 2022, for a total of \$770,000 in 2022 dollars.
- **Fill for Onsite Work.** An estimated 180,000 cyds are needed to raise the low holes to a minimum of two feet above the fully restored MHWS elevation of 4.7 feet NAVD88. The Parties have agreed to this design elevation with input from the course design team, and this elevation is higher than the storm of record maximum tides. Approximated half of that amount (90,000 cyds) would elevate those holes so that they would now longer have a flooding problem under current conditions. The additional fill (another 90,000 cyds) needed to raise those holes above new tidal water levels is connected to the restoration. Therefore, the Project assigns a credit equal to 50% of the material value of the 180,000 cyds of fill at \$11 cyd or \$990,000 in 2022 dollars.

6. Changes to Cost Allocation Spreadsheet.

The Parties agree that the *CYCC Golf Course Construction Budget and Cost Allocation – 040820* spreadsheet may be updated as the Project seeks and obtains Project funds. If after the allocation schedule is finalized, costs increase, the Parties agree that they will each be responsible for any increased costs, consistent with the proportions reflected in *CYCC Golf Course Construction Budget and Cost Allocation – 040820* spreadsheet.

7. Taxes.

The Parties agree that CYCC is solely responsible for any tax liability that may be associated with work on the CYCC Property.

CYCC Golf Course Construction Budget and Cost Allocation - 040820

Acct #	DESCRIPTION	Est. Quan.	Unit	Unit Price - Private	Total Private	HRRP					CYCC								
						Overall HRRP General Expense	Practice Fairway	#6	#7	#8	#9	#1	CYCC General Expense	Practice Fairway	#2	#3	#4	#5	
1630-00	Golf Course Renovation Cost Allocation Split																		
1630-01	Project Management - Construction (Passios/Nash) 55% HRRP/45% CYCC	1.00	LS	62,000	62,000	34,100													
1630-02	HMGA Construction Support & Expenses (Mauer) 55% HRRP/45% CYCC	1.00	LS	65,000	65,000	35,750													
1630-03	Irrigation Consulting Field Control, Staking & Expenses Split by hole per CPassios	1.00	LS	25,750	25,750														
1630-04	Permit Compliance Field Support & Review 55% HRRP/45% CYCC	1.00	LS	15,000	15,000		1,287	2,575	2,575	2,575	2,575	2,575							
1630-05	Contractor Performance Bond / Insurance 55% HRRP/45% CYCC	1.00	LS	35,000	35,000														
1630-06	Ground Control - Haul Road Survey 100% HRRP	1.00	LS	7,500	7,500														
1630-07	Ground Control - Golf Course Survey 55% HRRP/45% CYCC	1.00	LS	17,000	17,000														
1630-08	Mobilization 55% HRRP/45% CYCC	1.00	LS	60,000	60,000														
1630-09	Staging Site Development 55% HRRP/45% CYCC	1.00	LS	5,000	5,000														
1630-10	Erosion Control / Maint. 65% HRRP/34% CYCC	7,500.00	LF	6	45,000	29,700													
1630-11	Cleaning & Grubbing Haul Road 100% HRRP	3.00	AC	6,200	18,600	18,600													
1630-12	Cleaning / Grubbing, Root Raking (woods only) 100% HRRP SS will check	13.50	AC	6,200	83,700	83,700													
1630-13	Fill Excavation & Haul 100% HRRP	180,000.00	CY	4	630,000	630,000													
1630-14	Earthwork, Compaction, Rough Shaping 70/30 split	40.00	AC	4,000	160,000	115,000													
1630-15	Feature and Finish Shaping Split by hole per CPassios	14.00	AC	2,200	30,800		1,540	3,080	3,080	3,080	3,080	3,080							
1630-16	Drainage Structures & Winter Protection 100% HRRP	1.00	LS	26,000	26,000		26,000												
1630-17	Base Irrigation System (sprinklers, pipe, valves & field control) Split by hole per CPassios	1.00	LS	1,161,500	1,161,500		77,050	115,000	165,600	121,900	121,900	119,600							
1630-18	New Groundwater Supply 55% HRRP/45% CYCC	1.00	LS	100,000	100,000														
1630-19	Pond Liner Installed and anchored 55% HRRP/45% CYCC	1.00	LS	60,000	60,000														
1630-20	New Vertical Turbine pump Station 55% HRRP/45% CYCC	1.00	LS	110,000	110,000														
1630-21	New Pumphouse, Intake, Wet Well, Power service 55% HRRP/45% CYCC	1.00	LS	50,000	50,000														
1630-22	3-Phase Main Power 55% HRRP/45% CYCC	1.00	LS	40,000	40,000														
1630-23	Winter Crop Seeding Split by hole by CPassios	15	AC	300	4,500		225	450	450	450	450	450							
1630-24	Cart Path Development (4" recycled concrete) Split by hole by CPassios	8,500.00	LF	14	119,000		5,950	11,900	11,900	11,900	11,900	11,900							
1630-25	Fairway Feature Development Split by hole by CPassios	12.5	AC	950	11,875		848	1,696	1,696	1,696	1,696	1,696							
1630-26	Green Construction Split by hole by CPassios	45,801.00	SF	6	274,806		13,740	27,481	27,481	27,481	27,481	27,481							
1630-27	Tee Construction Split by hole by CPassios	68,298.00	SF	3	187,822		9,391	18,782	18,782	18,782	18,782	18,782							
1630-28	Bunker Coring & Drainage Split by hole by CPassios	27,500.00	SF	2	41,250		2,063	4,125	4,125	4,125	4,125	4,125							
1630-29	Bunker Sand Installation Split by hole by CPassios	2,750.00	T	25	68,750		3,438	6,875	6,875	6,875	6,875	6,875							
1630-30	Feature Drainage Split by hole by CPassios	1.00	LS	75,000	75,000		6,250	12,500	12,500	12,500	12,500	12,500							
1630-31	Irrigation Activation & Testing Split by hole by CPassios	1.00	LS	2,500	2,500		125	250	250	250	250	250							
1630-32	Soil amendments Split by hole by CPassios	28.06	AC	2,200	61,732		3,087	6,173	6,173	6,173	6,173	6,173							
1630-33	Seed Bed Preparation Split by hole by CPassios	40.00	AC	850	34,000		2,833	5,667	5,667	5,667	5,667	5,667							
1630-34	Sod Installation Split by hole by CPassios	70,000.00	SF	1	50,400		2,520	5,040	5,040	5,040	5,040	5,040							
1630-35	Grassing - Green & Tee Split by hole by CPassios	2.62	AC	2,800	7,336		367	734	734	734	734	734							
1630-36	Grassing - Fairways & Rough Split by hole by CPassios	25.44	AC	3,250	82,680		6,890	13,780	13,780	13,780	13,780	13,780							
1630-37	Mulching Split by hole by CPassios	28	AC	3,800	106,400		7,600	15,200	15,200	15,200	15,200	15,200							
1630-38	Creek Drainage Improvements 100% HRRP	617	CY	40	24,680			6,170	6,170	6,170	6,170	6,170							
1630-39	Timber Bridges (3) 100% HRRP	3	LS	90,000	270,000		67,500	67,500	67,500	67,500	67,500	67,500							
1630-40	Marsh Restoration (Seeding & Management Actions) 100% HRRP	1	LS	20,500	20,500			5,125	5,125	5,125	5,125	5,125							
1630-41	Out of Play Pollinator & Shrub Planting Split by hole by CPassios	9.5	AC	3,650	34,675		3,853	3,853	3,853	3,853	3,853	3,853							
	Sub Total				4,285,756														
1630-42	Contingency 18%						225,126	28,152	60,112	69,220	49,204	61,354	46,757						
	Golf Course Renovation Total (2019\$)				5,057,192	1,250,700	216,556	333,955	384,555	273,355	340,855	259,760	339,100	145,204	177,214	190,965	238,517	135,017	
	Escalate 2019\$ to 2022\$*	3 yrs	4%	1,12486	5,688,654	1,660,104	275,264	443,272	510,436	362,836	452,431	344,790	450,101	192,735	235,223	263,475	316,594	179,214	

Notes: (1) 4% inflation per year was used to determine 2022 dollars
 (2) Does not include \$450,000 in design & permitting costs funded by the Project
 (3) Cost estimates may change due to design refinements

	Total Cost	HRRP Cost Share	CYCC Cost Share
2019 \$	5,057,192	3,599,664	1,446,701
2022 \$	5,688,654	4,049,132	1,627,342
		2019 \$ 71%	2019\$ 29%
		2022 \$ 71%	2022\$ 29%