CAPITAL IMPROVEMENT PLAN FY2024 - FY2028

PROGRAM: DRAINAGE

Program Priority:

PROJECT NAME: Landing Subdivision Drainage Improvements

CIP NUMBER: DR2105

CONTACT PERSON: Christopher Sims

PROJECT COST BY FISCAL YEAR

Project Cost	Previously Appropriated	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Future Years	Total
Planning/Design	77,305							**$77,305**
Land								**$0**
Construction	599,500							**$599,500**
Equip/Furnishings								**$0**
Total Cost	**$676,805**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$676,805**

FUNDING SOURCE BY FISCAL YEAR

Funding Source	Previously Appropriated	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Future Years	Total
Prior Bonds								**$0**
GO Bonds	474,996							**$474,996**
Future Bonds								**$0**
Potential Grant(s)	201,809							**$201,809**
Park Dedication Fees								**$0**
4B Funding								**$0**
CRF Funds								**$0**
Other								**$0**
Total Funding	**$676,805**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$676,805**

PROJECT DESCRIPTION

1) FY2021: Design overland flow swales (1% flow minus existing pipe capacity) for extreme events (exceeding the 1% event volume). Swales expected to be a mix of earthen and paver types.

2) FY2022: Purchase existing easements in full for Drainage ROW at 6 locations (average 15' wide strips).

3) FY2023: Construction of proposed swales within the Landing Subdivision

CDBG-DR funds are available (Landing falls within Low-to-Moderate Income Zone).

PROJECT JUSTIFICATION

The Landing Subdivision drains directly to the Landing Ditch through 8 storm sewer outfalls. The outfall easements do not have defined swales and coupled with existing fences and heavy vegetation the sheet flow is, at a minimum, partially blocked through the easements. As currently graded, the existing drainage easements do not have sufficient capacity to carry the extreme event's sheet flow from the streets to Landing Ditch. This factor, combined with blockage of the drainage easements by fences and/or vegetation, causes excessive ponding in the street during an extreme event rainfall.

This project would purchase up to 6 of the existing easements as ROW. At all locations, swales will be constructed which will require the removal and replacement of the existing fence between 2 lots inside the easement/ROW. Drainage obstructions will be permanently removed, and the existing storm sewer manhole cover elevation adjusted as needed.

ADDITIONAL CONSIDERATIONS

	YES	NO	Recurring M&O Costs	Amount
Is the project necessary under State/Federal Mandate, contractual obligation, or City Code?		NO	Personnel/Benefits (50xx)	$0
			Supplies (51xx)	$0
Will this project create future Capital Projects?		NO	Repairs/Maintenance (52xx)	$0
Is your request in the current C I P ?	YES		Services (53xx)	$0
If yes, has the cost of the project changed?	YES		**TOTAL**	**$0**

CAPITAL IMPROVEMENT PLAN FY2024 - FY2028

PROGRAM: DRAINAGE

Program Priority: 1

PROJECT NAME: Newport & Ellis Landing Subdivision Drainage Improvements

CIP NUMBER: DR2104

CONTACT PERSON: Christopher Sims

PROJECT COST BY FISCAL YEAR

Project Cost	Previously Appropriated	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Future Years	Total
Planning/Design	96,480							**$96,480**
Land	99,800							**$99,800**
Construction		797,500						**$797,500**
Equip/Furnishings								**$0**
Total Cost	**$196,280**	**$797,500**	**$0**	**$0**	**$0**	**$0**	**$0**	**$993,780**

FUNDING SOURCE BY FISCAL YEAR

Funding Source	Previously Appropriated	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Future Years	Total
Prior Bonds								**$0**
GO Bonds								**$0**
Future Bonds								**$0**
Potential Grant(s)	196,280	797,500						**$993,780**
Park Dedication Fees								**$0**
4B Funding								**$0**
CRF Funds								**$0**
Other								**$0**
Total Funding	**$196,280**	**$797,500**	**$0**	**$0**	**$0**	**$0**	**$0**	**$993,780**

PROJECT DESCRIPTION

1) FY2021: Design overland flow swales (1% flow minus existing pipe capacity) for extreme events (exceeding the 1% event volume). Swales expected to be a mix of earthen and paver types.

2) FY2023: Purchase existing easements in full for Drainage ROW at 9 locations (average 15' wide strips).

3) FY2024: Construction of proposed swales within the Newport Subdivision

CDBG-DR funds (Newport w/i Low-to-Moderate Income Zone) will be used for construction up to the $6.9 million.

PROJECT JUSTIFICATION

The Newport Subdivision drains directly to the concrete lined Newport ditch through 14 storm sewer outfalls. The outfall easements do not have defined swales and coupled with existing fences and heavy vegetation the sheet flow is, at a minimum, partially blocked through the easements. As currently graded, the existing drainage easements do not have sufficient capacity to carry the extreme event's sheet flow from the streets to Newport Ditch. This factor, combined with blockage of the drainage easements by fences and/or vegetation, causes excessive ponding in the street during an extreme event rainfall.

This project would purchase up to 9 of the existing easements as ROW. At all locations, swales will be constructed which will require the removal and replacement of the existing fence between 2 lots inside the easement/ROW. Drainage obstructions will need to be permanently removed, and the existing storm sewer manhole cover elevation adjusted as needed.

ADDITIONAL CONSIDERATIONS

	YES	NO	Recurring M&O Costs	Amount
Is the project necessary under State/Federal Mandate, contractual obligation, or City Code?		NO	Personnel/Benefits (50xx)	$0
			Supplies (51xx)	$0
Will this project create future Capital Projects?		NO	Repairs/Maintenance (52xx)	$0
Is your request in the current C I P ?	YES		Services (53xx)	$0
If yes, has the cost of the project changed?	YES		**TOTAL**	**$0**

CAPITAL IMPROVEMENT PLAN FY2024 - FY2028

PROGRAM: DRAINAGE

Program Priority:

PROJECT NAME: **Brittany Bay Subdivision Drainage Improvements**

CIP NUMBER: DR2009

CONTACT PERSON: Christopher Sims

PROJECT COST BY FISCAL YEAR

Project Cost	Previously Appropriated	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Future Years	Total
Planning/Design	113,610							$113,610
Land	50,000							$50,000
Construction	332,900							$332,900
Equip/Furnishings								$0
Total Cost	**$496,510**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$496,510**

FUNDING SOURCE BY FISCAL YEAR

Funding Source	Previously Appropriated	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Future Years	Total
Prior Bonds								$0
GO Bonds	354,759							$354,759
Future Bonds								$0
Potential Grant(s)	141,751							$141,751
Park Dedication Fees								$0
4B Funding								$0
CRF Funds								$0
Other: Cash								$0
Total Funding	**$496,510**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$496,510**

PROJECT DESCRIPTION

The project will consist of a drainage study and HEC-RAS Model of Landing Ditch to ensure all drainage areas feeding into the creek are accounted for and to ensure the improved flows from the proposed drainage improvements can discharge into the creek without negatively impacting downstream neighborhoods along Landing Ditch.

The project includes the installation of concrete and gravel paver overflow swales at 4 of the 5 existing drainage easement sites within the subdivision. It is anticipated that at least 2 of the easements would be better suited as a Drainage ROW (Sites A1 and A2 - See post-Harvey "Landing, Rustic Oaks and Countryside Drainage" PER). The sites may require slope paving along Landing Ditch to prevent long term erosion of Landing Ditch banks. Due to this, it is anticipated that a US Corp of Engineers Nationwide Permit could be required. *If a USACE permit is needed, this will be the critical path for the project and should be started as early as possible. The USACE could permit this work under a Nationwide Permit or a Standard Individual Permit. A NWP is typically a 6 month process but a SIP is typically a 2 year proces*s.

CDBG-DR Grant Funding eligible; A request for additional FEMA funds are underway due to increased anticipated construction costs.

PROJECT JUSTIFICATION

The Brittany Bay Subdivision drains directly into Landing Ditch through 4 drainage outfalls to the west of the subdivision and to a tributary of Landing Ditch through 1outfall to the southeast of the subdivision. The easements do not have defined swales and coupled with existing fences and heavy vegetation the sheet flow is being at a minimum partially blocked through the easements. As currently graded, the existing drainage easements do not have sufficient capacity to carry the extreme event's sheet flow from the streets to Landing Ditch and its tributary. This factor, combined with blockage of the drainage easements by fences and/or vegetation, causes excessive ponding in the street during an extreme event rainfall.

ADDITIONAL CONSIDERATIONS

	YES	NO	Recurring M&O Costs	Amount
Is the project necessary under State/Federal Mandate, contractual obligation, or City Code?		NO	Personnel/Benefits (50xx)	$0
			Supplies (51xx)	$0
Will this project create future Capital Projects?		NO	Repairs/Maintenance (52xx)	$0
Is your request in the current C I P ?	YES		Services (53xx)	$0
If yes, has the cost of the project changed?	YES		**TOTAL**	**$0**