McGee & Associates

Project: GOLDEN GATE BEAUTIFICATION, M.S.T.U.

Golden Gate Pkwy.

Project Manager:	Collier County Public Services Division, Public Transportation & Neighbor	hood Enhancements Department	
Consultant:	McGee & Associates	Consultant's Representative:	Michael A. McGee, rla, isa
Contractor:	Hannula Landscaping & Irrigation Inc.	Contractor's Representative:	Dale Hannula
Report Period:	FY 16-17 February 2017	Report No.:	Five
AC - Indicates maj	or items recommended to be discussed by Advisory Committee, <u>S</u> - Indica	ites items recommended to be addres	sed by staff, <u>C</u> - Indicates items recommended to be

Location:

addressed by Contractor This report is prepared strictly to provide recommendations only and in no manner is to imply any authorization to the Contractor or its Sub-Contractors to perform services for Collier County.

Contractor is requested to address items as soon as possible and indicate in **RESPONSE/COMMENTS** column when and which items are corrected.

Please return electronic copy to our office prior to next month's MSTU site review and meeting.

Note: Copy picture out of comment boxes and then paste to additional sheet if picture is desired in larger size.

LOCATION/WORK AREA AC	S	<u>C</u>	<u>R</u>	MAINTENANCE SERVICES OBSERVATIONS & RECOMMENDATIONS	RESPONSE or COMMENTS
Observation dates: 2/10-14/17				MONTHLY ADDRESSED	
All Median locations		х		All Juniper plantings if not already, should be treated and continue to be treated for insects until the dry season has ended. Dead foliage and plants should be removed.	
Median #15 – 21		Х	3	Turf has dead areas due to being previously very water stress.	
Median #12 – 29 (3-19)			35	Medians that contain turf areas.	M&A: 02-13-14 The broadleaf weed treatment program needs to continue for all turf areas. M&A: 12-12-14 It is estimated that all median with turf have broadleaf weeds within over 75% to 90% of the turf areas. M&A: 06/11/15 Turf replacement planning is in process. Multiple medians have been reviewed for replacement by County staff and the Contractor. An on-site meeting was held and the following issues were discussed. The broadleaf weed coverage within the turf areas has improved, but many median turf areas still need review for replacement of the turf. It is also recommended that all planting beds be reviewed with regards to the turf edges being too close to the plants causing a conflict to occur between the plants, mowers and edger's. If the turf is too close then it is recommended to remove one or two strips of turf with a sod cutter so to expand the plant bed and create a open mulch area between the

Design * Environmental Management * Planning * Arborist

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GOLDEN GATE BEAUTIFICAT	TION,	M.S	.т.l	J.	Location: Golden Gate Pkwy. Report Period: FY 16-17, Fe	bruary 2017 Report No.: Five
LOCATION/WORK AREA	<u>AC</u>	<u>S</u>	<u>C</u>	<u>R</u>	MAINTENANCE SERVICES OBSERVATIONS & RECOMMENDATIONS	RESPONSE or COMMENTS
						plants and turf. In some locations this type of turf removal may result in a turf area that is too small to mow between the back of curb and the plants. It is recommended that these small turf areas be removed entirely and the areas be mulched. There will also be areas between planting beds that will become smaller turf areas and it may be better to remove these small turf areas and expand the plantings from the existing beds to cover these areas where the turf is removed thus tying the planting beds together. M&A: 8/13/15 Plan preparation is underway for turf renovations in all medians. M&A: 10/15/15 Sod Renovation plan completed and submitted. Contractor has been contacted to prepare proposal/estimate. M&A: 12-10-15 Staff response was waiting on proposal from contractor and 2016 rainy season.
Median #32 (1)			х	34	West end: Indian hawthorn shrubs have multiple dead and/or missing plants. Provide count of dead, missing or declining plants. If over 50 percent of plants are found to be dead missing or declining then it is recommended the area be renovated with Blueberry Flax lily 1 gal. size 36" o.c., 48" over back of curbing and other plants.	M&A: 7/9/14 There are over 50 plants that are dead, missing or in decline that need to be removed. Provide proposal to remove existing plants and install Flax lily 1 gal. size
Median #31 (2)			Х	35	Review Juniper on east end: Provide count of declined, missing or damaged Juniper due to pedestrian traffic. Approx. (4) plants have brown foliage and (4) plants are damaged.	
Median #30 (2A) (Pavers only)						
Median #29 (3)				26	Transplanted Carissa plants are in transplant shock and water stress. Increase irrigation if it is not already.	2/11/15 M&A: Some plants have turned brown due to transplant shock. Review for removal if stems are not alive. M&A: 4/15/15 Dead transplanted Carissa have been removed. Please update status of any replacements. M&A:8/13/15 Replacements being addressed in turf renovation plans.
				37	Turf areas in need of replacement. See Quarterly Addressed section for comments.	M&A: 06/11/15 See Median #12-29 comments above.
Median #28 (4)	<u> </u>	I		14	East end bed: On west end one dead Pine tree needs to be removed.	
No. 15	 	<u> </u>		36	Turf areas in need of replacement. See Quarterly Addressed section for comments.	M&A: 06/11/15 See Median #12-29 comments above.
Median #27 (5)	<u> </u>	<u> </u>		34	East end: $\frac{3}{(5)}(10) - Flax lily are dead or missing. Replace with 1 gal. size.$	
Madian #20 (0)	<u> </u>			36	Turf areas in need of replacement. See Quarterly Addressed section for comments.	M&A: 06/11/15 See Median #12-29 comments above.
Median #26 (6)			X	14	Dead foliage in Flax lily plants should be removed.	

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LOCATION/WORK AREA	AC	<u>S</u>	<u>C</u>	<u>R</u>	MAINTENANCE SERVICES OBSERVATIONS & RECOMMENDATIONS	RESPONSE or COMMENTS
			Х	20	West end bed: Liriope contains large amount of Torpedo grass weed.	M&A: 11/11/15 The torpedo grass is taking over the Liriope plants.
			Х	26	West end bed: (5) Dead and/or missing Flax lily plants. Install 1gal. size.	
			Х	37	Turf areas in need of replacement. See Quarterly Addressed section for comments.	M&A: 06/11/15 See Median #12-29 comments above.
Median #25 (7) Pump Station- Median #25 (7) east end, 15 hp , 8" well, VFD, Motorola Scorpio controller S3405-operates G.G. Pkwy. Medians 22-32 (1-10)			x		Transplanted Carissa plants west of pump station are in transplant shock and water stress. Increase irrigation if it is not already.	2/11/15 M&A: Some plants have turned brown due to transplant shock. Review for removal if stems are not alive. M&A: 4/15/15 Dead transplanted Carissa have been removed. Please update status of any replacements. M&A:8/13/15 Replacements being addressed in turf renovation plans.
			Х	37	Turf areas in need of replacement. See Quarterly Addressed section for comments.	M&A: 06/11/15 See Median #12-29 comments above.
Median #24 (8)			Х	14	Bahia turf placed in median after Traffic signal installation should be removed and area mulched. Median never contained turf and if it remains irrigation should be reviewed to see if there is proper coverage.	M&A. 03/09/16 Remove Bahia grass and extend Flax lily plants in 1 gal. size.
			Х	43	Provide count to fill in missing Liriope plants in middle area of median.	Hannula 1/13/14: Estimate #14-0005; submitted 1/10/14. Pending fund 111 staff approval, M&A 4/13/16: An updated proposal should be submitted.
Median #23 (9)			Х		Fakahatchee grass beds need to have dead foliage removed.	
	x	x	x		The recent traffic light mast arm installation on the north side of G.G. Parkway at the intersection with 44 th St SW and at the east end of median #9 is extended into the branches of an existing Live Oak (18"-20" caliper) and above an existing Sabal palm. The left turn signal light is being somewhat blocked by the Oak tree branches. It is recommended that the Oak tree be reviewed for special pruning and that the Sabal palm be scheduled for removal or relocation.	
				37	Turf areas in need of replacement. See Quarterly Addressed section for comments.	M&A: 06/11/15 See Median #12-29 comments above.
			X	51	Damaged area has grown over with native grasses and weeds. Apparent auto damage to turf on west median end. Provide proposal for repair and replacement. (photo)	Plant material to be replaced; sod will not be replaced. Hannula 1/13/14: Estimate #14-0005; submitted 1/10/14. Pending fund 111 staff approval, M&A:8/13/15 Replacements being addressed in turf renovation plans.
Median #22 (10)			Х	19	2nd bed from east end: Yellow Iris have torpedo grass within them.	
· ·			Х		East end bed: Juniper Parsoni bed is missing (2) plants. Replace with 3 gal. size.	
			Х	23	The invasive exotic Wedelia is taking hold again in the east end turf area. Treat to remove.	M&A: 5/11/15: Continue treatments. M&A:8/13/15 Replacements being addressed in turf renovation plans.
		Х	х	26	Median is in need of renovation due to amount of missing plants in multiple beds.	M&A:8/13/15 Replacements being addressed in turf renovation plans. See Median #12-29 comments above.
	1	1	Х	29	West end bed: Remove flagged declining Pine tree.	
			Х		West end bed: (10) Juniper parsoni are missing. Replace with 3 gal. size.	M&A:8/13/15 Replacements being addressed in turf renovation plans. See Median #12-29 comments above.



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GOLDEN GATE BEAUTIFICATION, M.S.T.U.

Location: Golden Gate Pkwy. Report Period: FY 16-17, February 2017 Report No.: Five

LOCATION/WORK AREA	<u>AC</u>	<u>S</u>	<u>C</u>	<u>R</u>	MAINTENANCE SERVICES OBSERVATIONS & RECOMMENDATIONS	RESPONSE or COMMENTS
			X		East end bed: 3 – White African Iris are dead or missing. Replace with 1 gal. size.	M&A: 8-14-14 (3) more additional Iris have declined or have died. M&A: 11-13-14 There are only (3) remaining Iris and (2) of those are in decline. It is recommended to remove the Iris and install a planting of Variegated Arboricola 'Trinette' in a three row planting. (45) 3 gal. size plants would be required. These Iris were originally planted by the Contractor as a bed expansion. M&A:8/13/15 Replacements being addressed in turf renovation plans.
				37	Turf areas in need of replacement. See Quarterly Addressed section for comments.	M&A: 06/11/15 See Median #12-29 comments above.
			X	9	West end turf area: Area has grown over with native grasses and weeds. Previously water stressed and/or chinch bug damage. Review irrigation coverage and treat as required. Remove dead turf and resod. (photo)	Hannula: 11-12-13 On monthly schedule. Hannula's 1/13/14: 1 st Treatment Completed on 12/2/13; 2 nd Treatment Scheduled for 01/20/14. 12/27/14 Irrigation coverage reviewed; irrigation coverage is fine. Estimate #14-0005; submitted 1/10/14. Pending fund 111 staff approval
Median #21 (11)			Х		African Iris beds need to have dead foliage removed.	
			Х		The east end Flax lily plants are declining and dying.	
			х	27	On the west end of the median there is a pile of construction debris/dirt & rocks at the back side of the pavers that has been overgrown with weeds. Please review and provide comments as to how this happened and who may have caused this.	M&A:8/13/15 Being addressed in turf renovation plans.
			Х	37	Turf areas in need of replacement. See Quarterly Addressed section for comments.	M&A: 06/11/15 See Median #12-29 comments above.
				53	East end bed: Flax lily has Torpedo grass in them. Continue to remove and treat Torpedo grass in Iris plants.	Hannula: 11-12-13 On weekly schedule. Hannula 1/13/14: Fucilade to be applied during next herbicide application on Jan 20 th 2014, M&A: 4-12-14 Continue to review and hand remove Torpedo grass. M&A 5-14-14 Still minor amounts of Torpedo grass exist. Continue to review, treat, and hand remove.
Median # 20 (12) Pump Station- Median #20 (12) west end, 15 hp , 8" well, VFD, Motorola Irrinet controller #34- operates G.G. Pkwy. Medians 21- 15 east side of canal, (11-18) & Hunter Blvd. & Coronado Pkwy.			X		Fakahatchee grass and African Iris beds need to have dead foliage removed. Coontie bed on the east end has dead plants and/or foliage that needs to be removed. Review for insect issues.	
			Х	14	Multiple variegated Pittosporum are dead from fungus and all should be removed and area mulched.	M&A: 10/7/16 These dead plants look very bad and reflect badly against the County maintenance





GOLDEN GATE BEAUTIFICATION, M.S.T.U.

Location: Golden Gate Pkwy.

Report Period: FY 16-17, February 2017 Report No.: Five LOCATION /WORK AREA AC S C R MAINTENANCE SERVICES ORSERVATIONS & RECOMMENDATIONS RESPONSE or COMMENTS

LOCATION/WORK AREA	AC	<u>S</u>	<u>C</u>	<u>R</u>	MAINTENANCE SERVICES OBSERVATIONS & RECOMMENDATIONS	RESPONSE or COMMENTS
						program. When many roadway medians are being renovated around the County it makes no sense not to remove these dead plants that have been there for the past 11 months.
			x	20	Auto accident on west end bed south side. 3 or 4 Big Rose plants damaged.	M&A: 9/17/15 Remove damaged plants. M&A: 10/15/15 Replacements needed. M7A: 03/09/16 There are now 22 dead, missing and/or declining plants. Unsure of the cause, because it could be due to previous cutback, vehicular or work within the area.
				20	Three (3) Fakahatchee grass beds are or have been damaged by insects and the foliage is typically all brown. Recommend heavy cutback and then retreat for insects. Any completely dead plants should be replaced with 3 gal. size plants.	
				38	Turf areas in need of replacement. See Quarterly Addressed section for comments.	M&A: 06/11/15 See Median #12-29 comments above.
Median #19 (13)		Х	Χ		There are still apparent irrigation issues with this median.	
		х		10	On the west end south side there are two variegated Pittosporum shrubs that were damaged during the traffic signal installation. removal & replacement is recommended.	
	Х	Х	Х	10	Previous water stress issues have created dead turf areas.	
			Х	35	Turf areas in need of replacement. See Quarterly Addressed section for comments.	M&A: 06/11/15 See Median #12-29 comments above.
Median #18 (14)		Х	Х	2	There are still apparent irrigation issues with this median.	
	Х	Х	Х	10	Previous water stress issues have created dead turf areas.	
				37	Turf areas in need of replacement. See Quarterly Addressed section for comments.	M&A: 06/11/15 See Median #12-29 comments above.
			X	38	Turf areas look very bad. Unless an auto accident is to blame the Contractor needs to address this bad turf area that was under its maintenance (photo)	Hannula 1/13/14: Estimate #14-0005; submitted 1/10/14. Pending fund 111 staff approval. M&A:8/13/15 Replacements being addressed in turf renovation plans.
Median #17 (15)		Х	Х	2	There are still apparent irrigation issues with this median.	
		х	х		Fakahatchee grass bed are extremely water stressed and all the foliage is brown. Recommend removing brown/dead foliage and watering.	M&A: 12/9/16 Remove dead and brown foliage.
	Х	Х	Х	10	Previous water stress issues have created dead turf areas.	
			Х	14	At address 4930: Large turf area dead due to water stress from no irrigation coverage.	M&A: 4/13/16 The area of turf lost due to lack of water has increased throughout the median.
				20	One (1) Fakahatchee grass bed has been damaged by insects and the foliage is typically all brown. Recommend heavy cutback and then retreat for insects. Any completely dead plants should be replaced with 3 gal. size plants.	M&A: 4/13/16 Plants are water stressed.
			Х	22	Turf area on south side of median at Sabal palm has had the turf killed by some chemical. Review and submit proposal for replacement.	M&A:8/13/15 Replacements being addressed in turf renovation plans.
			Х	26	2nd bed from west end: Remove remaining Pittosporum and Indian hawthorn shrubs and then expand adjacent Flax lily plants. (60) 1 gal. size.	M&A:9/17/15 Replacements being addressed in turf renovation plans.



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LOCATION/WORK AREA	AC	S	С	<u>R</u>	MAINTENANCE SERVICES OBSERVATIONS & RECOMMENDATIONS	RESPONSE or COMMENTS
			X	37	Turf areas in need of replacement. See Quarterly Addressed section for comments.	M&A: 06/11/15 See Median #12-29 comments above.
		Х	Х	2	There are still apparent irrigation issues with this median.	
Median #16 (16)	Х	Х	Х	10	Previous water stress issues have created dead turf areas.	
			х	22	1st end bed on east end: Hand remove Tillandsia (Air plants) plants in Crape myrtle tree.	
			Х	37	Turf areas in need of replacement. See Quarterly Addressed section for comments.	M&A: 06/11/15 See Median #12-29 comments above.
Median #15 (17 – East of canal)			х		Water stressed Fakahatchee grass beds need to have the brown and/or dead foliage pruned away.	
		Х	Х		There are still apparent irrigation issues with this median.	
		Х	х	4	Two Fakahatchee grass beds are extremely water stressed and all the foliage is brown. Recommend removing brown/dead foliage and watering.	M&A: 12/9/16 Remove dead and brown foliage.
	Х	Х		10	Previous water stress issues have created dead turf areas.	
		x	x	23	Existing Liriope and Big Rose bed sustained damage. Big Rose plants and Ligustrum tree has been cut back or removed. It is recommended to remove remaining Big Rose, Liriope and Ligustrum tree stump and then expand Flax lily plants to the west. It is estimated about (75) 1 gal. plants will be needed. Review and provide plant count based upon 36 inch on center spacing and 36 inch offset from back of curbing. bed preparation should be included to lower existing grade below curbing so that mulch can be retained.	Recommend providing proposal to proper County staff. See Median #12-29 comments above. M&A:8/13/15 Replacements being addressed in turf renovation plans.
			Х	37	Turf areas in need of replacement. See Quarterly Addressed section for comments.	M&A: 06/11/15 See Median #12-29 comments above.
			x	43	4 th bed from east end: Expand Flax lily bed into area of removed plants. Remove all Indian hawthorn plants. (photo)	Hannula 7/16/13: County postponed replacements until Oct. 2013., M&A: 9-12-13 Provide proposal to staff for replacements. M&A: 12-12-13 (1) Indian hawthorn still needs to be removed at base of Oak tree. Hannula 1/13/14: Indian hawthorn removed.
Median #15 (17) (Old #18 –West of canal)			X	26	Review Flax lily plants and provide count of dead or missing plants. 1 gal. size.	M&A: 4/15/15 Flax lily: Treat for rust disease with systemic type chemical. Treat for root rot and snails. Remove dead foliage within and around base of plants. In the future reduce mulch in contact and inside of Lily plants. Existing mulch depth and caking is not permitting water to penetrate into the soil. Interior sides of plants are dry below mulch.
Median #14 (#19 – Paver only)			İ -			
Median #13 (18) (Old #20)				34	Turf areas in need of replacement. See Quarterly Addressed section for comments.	M&A: 06/11/15 See Median #12-29 comments above.
Median #12 (19) (Old #21, Sign) Pump Station- Median #12 (19) (Old		х	Х	12	One Silver saw palmetto is dead in the planting bed behind the sign and should be replaced with a 10 gal. size plant.	



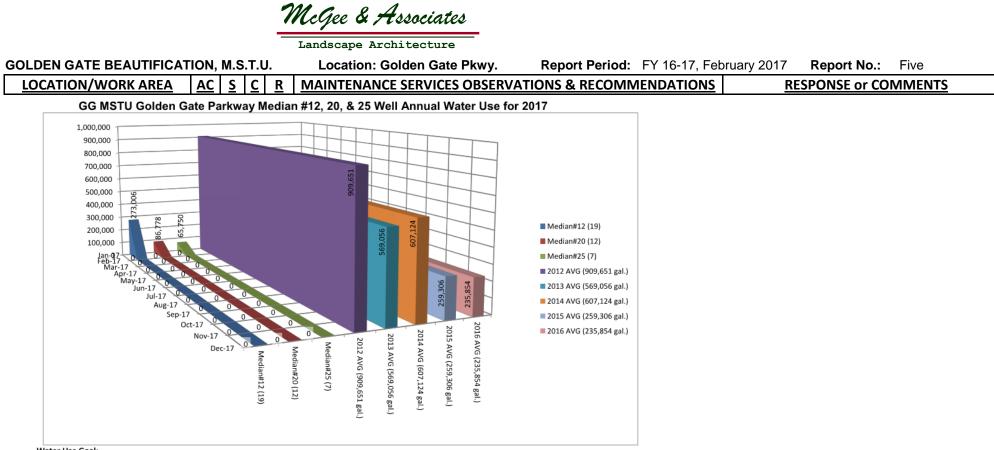
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GOLDEN GATE BEAUTIFICA	TION,	M.S	5.T.U	J.	Location: Golden Gate Pkwy. Report Period: FY 16-17, Fe	bruary 2017 Report No.: Five
LOCATION/WORK AREA	<u>AC</u>	<u>S</u>	<u>C</u>	<u>R</u>	MAINTENANCE SERVICES OBSERVATIONS & RECOMMENDATIONS	RESPONSE or COMMENTS
#21) east end bed, 7.5 hp , 6" well, VFD , Motorola Scorpio controller S3401-operates G.G. Pkwy. Medians 11-15 west side of canal (19-22).						
			Х	34	Turf areas in need of replacement. See Quarterly Addressed section for comments.	M&A: 06/11/15 See Median #12-29 comments above.
Median #11 (20) (Old #22)						
Irrigation General:		Х		4	Water use per the meter readings is showing low water use from wells in median #25 and 20.	
					QUARTERLY ADDRESSED	
All medians with turf:			x	36	Turf areas in need of replacement.	Provide proposal to show required turf replacement square footage for each median. M&A: 06/11/15 See Median #12-29 comments above M&A: 8/13/15 Plan preparation is underway for turf renovations in all medians.
Median #23 (9)			x	40	3 rd bed from east end: Add 12- 3 gal. Fakahatchee grass in middle of bed.	Hannula 7/16/13: County postponed replacements until Oct. 2013., M&A: 9-12-13 Provide proposal to staff for replacements. Hannula 1/13/14: Estimate #14-0005; submitted 1/10/14. Pending fund 111 staff approval. See Median #12-29 comments above.
		X		60	The Mr. Farrow and Mr. Melchore memorial plaque and base need to be cleaned and base repainted. (photo)	M&A:8/13/15 Pavers around the Memorial plaque have settled and broken away from pattern. Pavers need to be
Median #17 (15)			x	39	2 nd bed from west end: Remove declining Variegated Pittisporum and Indian	reset. Hannula 7/16/13: County postponed replacements until
					hawthorn shrubs and replant area with Blueberry Flax Lily. 60 – 1 gal. plants will be needed to expand westward from existing Flax lily bed.	Oct. 2013., Removal on schedule to completed by 9/15/13., M&A: 11-13-14 remove all Pittosporum shrubs and then replant with Flax lily. Provide proposal. Hannula 1/13/14: Estimate #14-0005; submitted 1/10/14. Pending fund 111 staff approval, M&A: 4-12-14 Remove additional dead and dying variegated Pittosporum shrubs. See Median #12-29 comments above.



Commented [mam5]:



Water Use Goal:

(5.73 ac. of Plants & Turf)

Recommended: Supplemental watering rate of .75 to 1 inch per week. One inch per week equals 155,594 gallons per week or 622,376 gallons per month.

2012 total water use: 10,915,815 gallons or 70.16 inches of supplemental water pumped.

2013 total water use: 6,828,673 gallons or 43.89 inches of supplemental water pumped.

2014 total water use: 7,285,490 gallons or 46.83 inches of supplemental water pumped.

2015 total water use: 3,111,667 gallons or 20.00 inches of supplemental water pumped, data not fully accurate, meter malfunctions #20 & 25.

2016 total water use: 2,830,251 gallons or 18.19 inches of supplemental water pumped, data not fully accurate, meter malfunctions #20 & 25.

2/13/2017

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