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MEMORANDUM

646-385

TO: Curt Smith, Home Fed Village 3, LLC

FROM: ^{Smw} Stephen M. Nielsen, P.E., Dexter Wilson Engineering, Inc.

DATE: October 30, 2020

SUBJECT: Otay Ranch 3 SPA Amendment Water Conservation Plan
Evaluation

Background

HomeFed Village III, LLC proposes revisions to the Village 3 land use plan. The land use changes are detailed in the project description, site utilization plan, and site utilization table provided as Attachment 1. Amendments to the Chula Vista General Plan, Otay Ranch General Development Plan, the Village 3 North and a Portion of Village 4 SPA Plan, the Village 9 SPA Plan and the Village 9 Tentative Map are necessary to implement the proposed changes. Tentative maps for the updated residential parcels are also necessary to implement the proposed changes. The proposed changes would increase the total residential unit count in Village 3 from 1,597 units to 1,638 units and reduce the total residential unit count in Village 9 from 4,000 units to 3,959 units, resulting in no net change to the unit count of Otay Ranch.

The Village 3 North project was approved as part of the University Villages Project Comprehensive SPA Plan Amendment Final Environmental Impact Report (2014 FEIR) and amended in 2016. The FlatRock Property was approved for development in 2006 as part of the Otay Ranch Village Two, Three, and a portion of Village Four Sectional Planning Area (SPA) Plan Final Second Tier Environmental Impact Report (2006 FEIR). The Village 3 North 2016 SPA Amendment and the 2006 FEIR reflect the most current approval for the project. The purpose of this memorandum is to evaluate the impact of the proposed land use changes for Village 3 on the findings from previous approvals.

Village 3 and a Portion of Village 4 SPA Amendment Summary

A summary of proposed changes to the Village 3 land use plan is provided as follows:

- Expand the SPA boundary to include the FlatRock Parcel which includes a parcel currently designated Limited Industrial and adjacent Open Space and Preserve Open Space areas.
- Change the land use designation and rezone a portion of the FlatRock Parcel from Industrial (I) to Residential (RM-1), designate the residential parcel “R-20” and allocate 116 multi-family units to R-20.
- Change the land use designation and rezone parcel O-1 and O-2 from Office (O) to Residential (RM-2), designate the parcel “R-19” and allocate 224 multi-family units to R-19.
- Change the land use designation and rezone parcel R-6 from Residential (SF-4) to Residential (RM-1) and allocate 78 multi-family units to R-6.
- Relocate the water quality basin within the R-20 parcel.

Water Demand Projection – Approved Plan (2016 SPA Amendment)

Table 1 summarizes the projected average day water demands for Village 3 based on the approved land use plan as presented in the 2016 SPA Amendment. This analysis used the water demand factors from the 2008 Otoy Water District Water Resources Master Plan Update (Revised April 2013).

TABLE 1 VILLAGE 3 APPROVED LAND USE PLAN PROJECTED WATER DEMANDS (2016 SPA AMENDMENT and 2006 FEIR)			
Land Use	Quantity	Demand Factor	Average Demand, gpd
SF Residential (3-8 DU/ac)	621 units	500 gpd/DU	310,500
SF Residential (>8 DU/ac)	381 units	300 gpd/DU	114,300
MF Residential	595 units	255 gpd/DU	151,725
Mixed-Use Commercial	8.1 ac ¹	1,607 gpd/ac	13,017
Office	8.3 ac	1,607 gpd/ac	13,338
Industrial	16.6 ac ²	848 gpd/ac	14,076
School	8.3 ac	1,428 gpd/ac	11,852
Park	25.9 ac	0 gpd/ac ³	2,160
CPF	1.0 ac ⁴	714 gpd/ac	714
FlatRock – Industrial ⁵	11.3 ac	893 gpd/ac	10,090
TOTAL			641,772

¹ Mixed use commercial is based on 90 percent of gross acreage.

² Industrial is based on net acreage.

³ Parks will be irrigated with recycled water, but a nominal amount of potable use has been estimated.

⁴ CPF only includes CPF-1 since small CPF sites will have no potable water use.

⁵ Water estimate based on Village 2, 3 and a Portion of Village 4 EIR (2006 FEIR)

Proposed Land Use Plan

The proposed site utilization plan and land use summary table are provided as Attachment 1. The proposed project does not propose any changes to the backbone streets but does change proposed land uses and residential unit counts in several of the neighborhoods.

Water Demand Projection – Proposed Plan (2020 SPA Amendment)

Table 2 summarizes the projected average sewer flows for Village 3 based on the currently proposed 2020 SPA Amendment. This projection uses current water demand factors from the 2015 Otay Water District Water Master Plan. The decrease in water demand factors compared to the 2016 SPA Amendment is due to water conservation efforts in recent years.

TABLE 2 VILLAGE 3 PROPOSED LAND USE PLAN PROJECTED WATER DEMANDS (2020 SPA AMENDMENT)			
Land Use	Quantity	Demand Factor	Average Demand, gpd
SF Residential (3-8 DU/ac)	432 units	425 gpd/DU	183,600
SF Residential (>8 DU/ac)	337 units	255 gpd/DU	85,935
MF Residential	869 units	255 gpd/DU	221,595
Mixed-Use Commercial	8.2 ac ¹	1,607 gpd/ac	13,177
Industrial	15.6 ac ²	848 gpd/ac	13,229
School	8.3 ac	1,428 gpd/ac	11,852
Park	25.9 ac	0 gpd/ac ³	2,160
CPF	1.8 ac	714 gpd/ac	1,285
TOTAL			532,833

¹ Mixed use commercial is based on 90 percent of gross acreage.
² Industrial is based on net acreage (from 2016 SPA Amendment water memo).
³ Parks will be irrigated with recycled water, but a nominal amount of potable use has been estimated.
⁴ CPF only includes CPF-1 and CPF-3 since CPF-2 will have no potable water use.

In comparing the projections from Tables 1 and 2, the proposed 2020 SPA Amendment will decrease previous water demand projections by approximately 17 percent compared to the 2016 SPA Amendment.

Water Conservation Savings

A water conservation plan was prepared for Village 3 North in 2016 as part of the project approval. In addition to standard water conservation measures, residential units within Village 3 have committed to installing the following two additional measures:

- Dual flush toilets
- Water efficient landscaping

The proposed additional residential units for Village 3 will be required to incorporate the above measures.

The September 2016 Water Conservation Plan estimates water conservation savings from the use of recycled water and from the implementation of water conservation measures at single-family and multi-family residences. Table 3 summarizes the total projected water conservation savings from the 2016 Water Conservation Plan with projections from the Flatrock property included.

TABLE 3 OTAY RANCH VILLAGE 3 NORTH SEPTEMBER 2016 WATER CONSERVATION PLAN			
Description	Units	Water Savings, gpd/unit	Total Water Savings, gpd
Recycled Water	---	---	169,358 ¹
Single-Family Residential	1,002	49.25	49,349
Multi-Family Residential	595	24.25	14,429
TOTAL			233,136

¹ Includes recycled water demand from Flatrock property per 2006 FEIR.

Based on the current proposed 2020 SPA Amendment, Table 4 provides the estimated recycled water savings and Table 5 summarizes the total estimated water conservation savings.

TABLE 4 OTAY RANCH VILLAGE 3 PROJECTED RECYCLED WATER DEMANDS				
Land Use	Area (ac)	% Irrigated	Irrigated Area (ac)	AAD, gpd
Open Space	39.4	100	39.4	84,907
Parks	25.9	100	25.9	55,815
Mixed-Use Commercial	9.0	10	0.90	1,940
CPF	2.7	20	0.54	1,164
Multi-Family	38.3	15	5.75	12,391
School	8.3	20	1.66	3,577
Industrial	29.3	5	1.47	3,168
TOTAL				162,962

TABLE 5 OTAY RANCH VILLAGE 3 CURRENT SPA AMENDMENT (2020) ESTIMATED WATER CONSERVATION SAVINGS			
Description	Units	Water Savings, gpd/unit	Total Water Savings, gpd
Recycled Water	---	---	162,962
Single Family Residential	769	49.25	37,873
Multi-Family Residential	869	24.25	21,073
TOTAL			221,908

Curt Smith
October 30, 2020
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Conclusion

The proposed SPA Amendment for Village 3 will decrease total water conservation savings by 4.8 percent. The estimated recycled water use is slightly decreased from the 2016 report due to a shift in the proposed land uses. Residential water conservation savings are also decreased slightly due to the decrease in the number of single family residential units. The net effect is that projected total water conservation savings are decreased from 233,136 gpd to 221,908 gpd, or by 4.8 percent.

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ATTACHMENT 1

**SITE UTILIZATION PLAN
LAND USE SUMMARY**

OTAY RANCH VILLAGE 3 PROPOSED AMENDMENTS
PROJECT DESCRIPTION
(Revised September 14, 2020)

Otay Ranch Village 3 is a mixed use village located in the southwest portion of Otay Ranch. While completing a re-planning effort for the Village 3 North area in 2016, HomeFed Village III, LLC/FlatRock, LLC (Applicant) began grading/construction. Village 3 North is completely graded, and all associated infrastructure has been constructed, with the exception of Main Street improvements. The village is built-out, with the exception of several industrial pads located north of Heritage Road and the R-6 residential neighborhood. The FlatRock Parcel is partially developed with a water quality basin that serves Village 3 to the north.

The Applicant proposes revisions to Village 3 which include 1) expanding the Village 3 North and a Portion of Village 3 Sectional Planning Area (SPA) Plan boundary to include the portion of Village 3 south of Main Street (FlatRock Parcel), 2) changing land uses on three parcels within Village 3 from “Office,” “Industrial” and “Medium Residential” to “Medium-High Residential” and “High Residential” and 3) transferring 41 “Town Center” multi-family residential units from Village 9 to Village 3. With the addition of the FlatRock Parcel, the SPA Plan would include the entire Village 3 area and would no longer refer to “Village 3 North,” but would refer to “Village 3” as a stand-alone SPA Plan document.

Amendments to the Chula Vista General Plan (CVGP), Otay Ranch General Development Plan (GDP), the Village 3 North and a Portion of Village 4 SPA Plan, the Village 9 SPA Plan and the Village 9 Tentative Map are necessary to implement the proposed changes. Tentative maps for the residential parcels R-6, R-19 and R-20 are also necessary to implement the proposed changes. The unallocated and unused units currently authorized within Village 3 (377 DUs) and the units proposed to be transferred from Village 9 (41 DUs) would be allocated to R-6, R-19 and R-20 per the Village 3 and a Portion of Village 4 Land Use Summary Table provided below. The proposed amendments would increase the total Village 3 residential unit count from 1,597 units to 1,638 units and correspondingly reduce the total Village 9 residential unit count from 4,000 units to 3,959 units, resulting in no new units within Otay Ranch. The following table summarizes the unallocated/unused units currently authorized within Village 3 and the proposed transfer units from Village 9 to Village 3 to achieve the proposed allocation of 418 units within the proposed project:

VILLAGE 3 UNITS & PROPOSED TRANSFER UNITS:

Land Use	Acreage	DUs
<i>Village 3</i>		
Office	8.3	0
MU-2 (Unused)	0	6
R-6 (SF)	5.2	44
SF (Unallocated)	0	189
MF (Unallocated)	0	138
Subtotal Village 3	13.5	377¹
<i>Villages 2, 3, 4</i>		
FlatRock Industrial	11.3	
Subtotal Villages 2, 3, 4	24.8	377
<i>Village 9</i>		
MF Unit Transfer	0	41
TOTAL	24.8	418

The Proposed Project includes the following:

CVGP/GDP Amendments

- Update the CVGP and GDP Land Use Maps and tables to change the land use designations for R-6 from Low-Medium Residential to Medium-High Residential; R-19 from Professional & Office to High Residential and R-20 from Limited Industrial to Medium-High Residential.

Village 3 North and a Portion of Village 4 SPA Amendment

- Expand the SPA boundary to include the FlatRock Parcel which includes a parcel currently designated Limited Industrial and adjacent Open Space and Preserve Open Space areas.
- Change the land use designation and rezone a portion of the FlatRock Parcel from Industrial (I) to Residential (RM-1), designate the residential parcel “R-20” and allocate 116 multi-family units to R-20.
- Change the land use designation and rezone parcels O-1 and O-2 from Office (O) to Residential (RM-2), designate the parcel “R-19” and allocate 224 multi-family units to R-19.
- Change the land use designation and rezone parcel R-6 from Residential (SF-4) to Residential (RM-1) and allocate 78 multi-family units to R-6.
- Relocate the water quality basin within the R-20 parcel.
- Update SPA Plan text, tables and exhibits to reflect the proposed land use changes.

¹ Unallocated and unused units authorized pursuant to the Village 3 North SPA Plan and Tentative Map Approved December 6, 2016.

- Update SPA Appendices – Village Design Plan, Air Quality Improvement Plan, PFFP, Fire Protection Plan, Preserve Edge Plan, Affordable Housing Plan, Water Conservation Plan and Energy Conservation Plan to reflect the SPA Amendment.

Tentative Maps

- A Tentative Map is proposed for the R-19 Parcel
- A Tentative Map is proposed for the R-6 and R-20 Parcels

Village 9 SPA Amendment

- Revise the Village 9 Site Utilization Table to reduce the multi-family units within the Urban Center land use category from 1,912 to 1,871 DUs and reduce the total authorized units in Village 9 from 4,000 to 3,959 DUs

Village 9 Tentative Map Revision

- Revise the Land Use Table to reduce the multi-family units in Parcels A, B-1, B-2, D, E-1, E-2, H-1 and H-2 by a combined total of 41 DUs.

Village 3 Core Master Precise Plan

- Update the MPP to reflect the revised land uses within the Village Core (Prior to design review approval for R-19)

Development Agreement Amendments

- Amendments to the Development Agreements between HomeFed Village III Master, LLC and the City and FlatRock, LLC and the City are proposed.

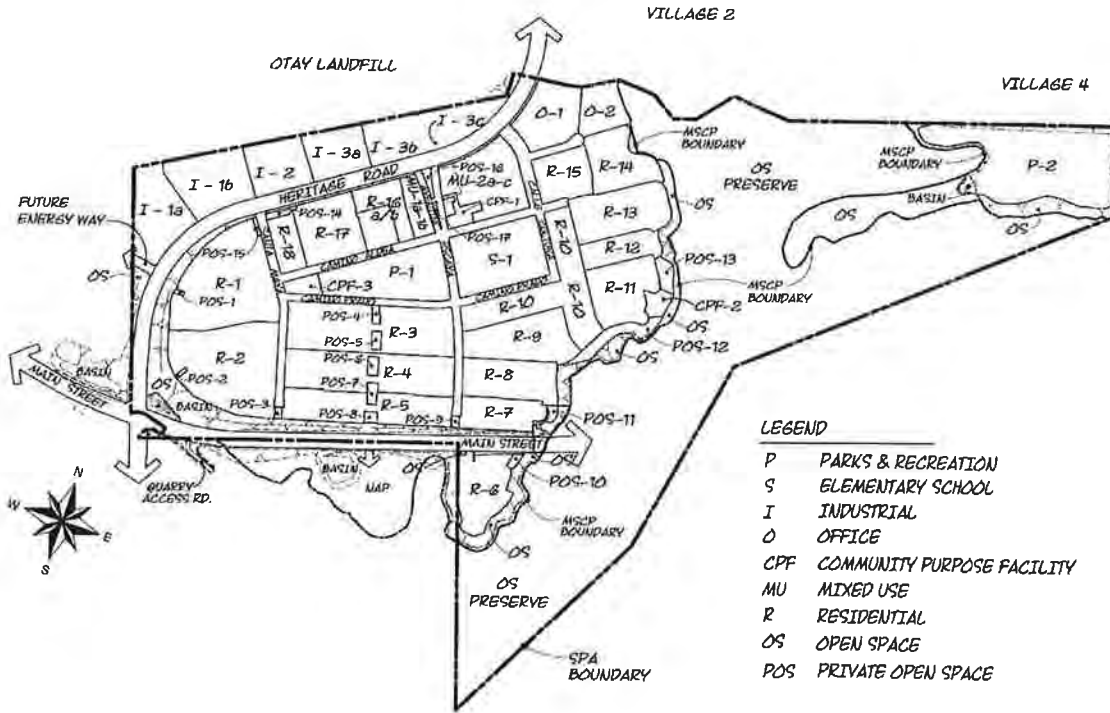
CEQA

The Proposed Project will likely require preparation of an addendum to the University Villages Environmental Impact Report (University Villages EIR) certified by the Chula Vista City Council in December 2014. Analysis of the FlatRock LLC property would rely on the 2006 Villages 2, 3 and a Portion of Village 4 EIR. The technical studies prepared for the University Villages EIR and updated for the 2016 Addendum and the technical studies prepared for the 2006 Villages 2, 3 and a Portion of Village 4 will be evaluated, and the following technical memorandums and studies will be prepared to address plan changes.

- Biological Resources Technical Memorandum (Dudek)
- Air Quality and Global Climate Change Technical Memorandum (Dudek)
- Health Risk Assessment and Nuisance Study (Dudek)
- Noise Assessment Technical Memorandum (Dudek)
- Trip General Memo (Chen Ryan)
- Archaeological Evaluation of Cultural Resources Letter (Dudek)
- Paleontological Resource and Monitoring Assessment Letter (Dudek)
- Drainage Study for Otay Ranch Village 3, R-6 and R-20 Tentative Map (Hunsaker)

- **Priority Development Project (PDP) Storm Water Quality Management Plan (SWQMP) for Otay Ranch Village 3, R-6 and R-20 Tentative Map (Hunsaker)**
- **Drainage & Storm Water Quality Management Plan Compliance Memo for Otay Ranch Village 3, R-19 Tentative Map (Hunsaker)**
- **Overview of Sewer Service Update (Wilson Engineering)**
- **Overview of Water Service Update (Wilson Engineering)**
- **Geotechnical Investigation Letter (GEOCON)**
- **Fiscal Impact Analysis Update (Development Planning & Financing Group)**

Existing Village 3 North and a Portion of Village 4 Site Utilization Plan

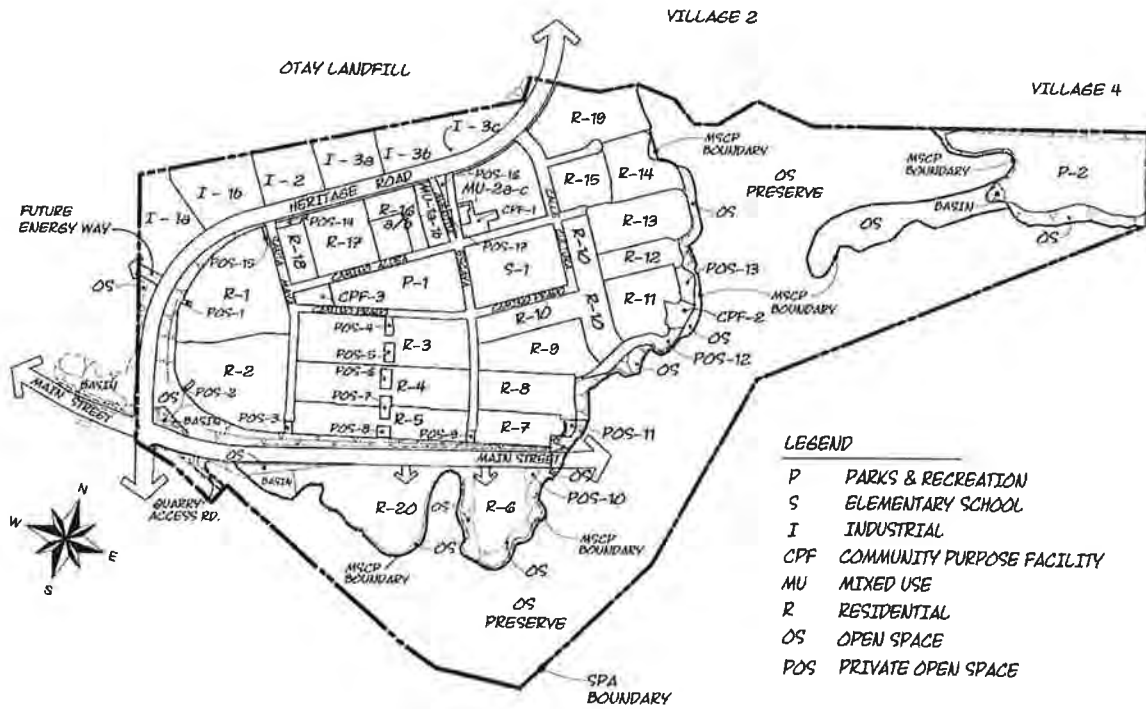


LEGEND

P	PARKS & RECREATION
S	ELEMENTARY SCHOOL
I	INDUSTRIAL
O	OFFICE
CPF	COMMUNITY PURPOSE FACILITY
MU	MIXED USE
R	RESIDENTIAL
OS	OPEN SPACE
POS	PRIVATE OPEN SPACE

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Proposed Village 3 and a Portion of Village 4 Site Utilization Plan



LEGEND

P	PARKS & RECREATION
S	ELEMENTARY SCHOOL
I	INDUSTRIAL
CPF	COMMUNITY PURPOSE FACILITY
MU	MIXED USE
R	RESIDENTIAL
OS	OPEN SPACE
POS	PRIVATE OPEN SPACE

Proposed Site Utilization Plan Table

Land Use	Unit Type	Acres	Units	Target Density
Single Family				
R-1	SF	12.4	80	6.5
R-2	SF	12.3	65	5.3
R-3	SF	11.5	104	9.0
R-4	SF	9.5	75	7.9
R-5	SF	7.5	46	6.1
R-7	SF	3.8	22	5.8
R-8	SF	5.5	43	7.8
R-9	SF	6.7	40	6.0
R-10	SF	9.5	98	10.3
R-11	SF	5.7	37	6.5
R-12	SF	3.1	24	7.7
R-13	SF	6.6	58	8.8
R-17	SF	5.7	53	9.3
R-18	SF	2.3	24	10.4
SF Total		102.1	769	
Multi Family				
R-6	MF	5.6	78	13.9
R-14	MF	5.0	71	14.2
R-15	MF	3.9	54	13.8
R-16 a/b	MF	4.6	54	11.7
R-19	MF	8.3	224	27.0
R-20	MF	10.9	116	10.6
MF Total		38.3	597	
Mixed Use				
MU-1a-d	MH	1.8	30	16.7
MU-2a-c	MU	7.2	242	33.6
MU Total		9.0	272	
Residential Total		149.4	1,638	11.0
Community Purpose Facilities				
CPF-1		0.9		
CPF-2		0.9		
CPF-3		0.9		
Total CPF		2.7		
Private Open Space				
		5.3		

Land Use	Unit Type	Acres	Units	Target Density
Public Parks				
P-1		8.1		
P-2 (Village 4)		17.8		
Total Public Parks		25.9		
School		8.3		
-	-			-
Industrial				
I-1a		6.3		
I-1b		6.4		
I-2		4.6		
I-3a		4.2		
I-3b/c		7.8		
Total Industrial		29.3		
Open Space				
Open Space		39.4		
Preserve		192.3		
Total OS		231.7		
Circulation				
External Circulation		21.0		
Internal Circulation		16.2		
Total Circulation		37.2		
TOTAL		489.7	1,638	