

BUILDING ENTERPRISE FUND ADVISORY COMMITTEE

May 5, 2021

FINANCIAL UPDATE



Building Enterprise Fund Financial Update

December 31, 2020

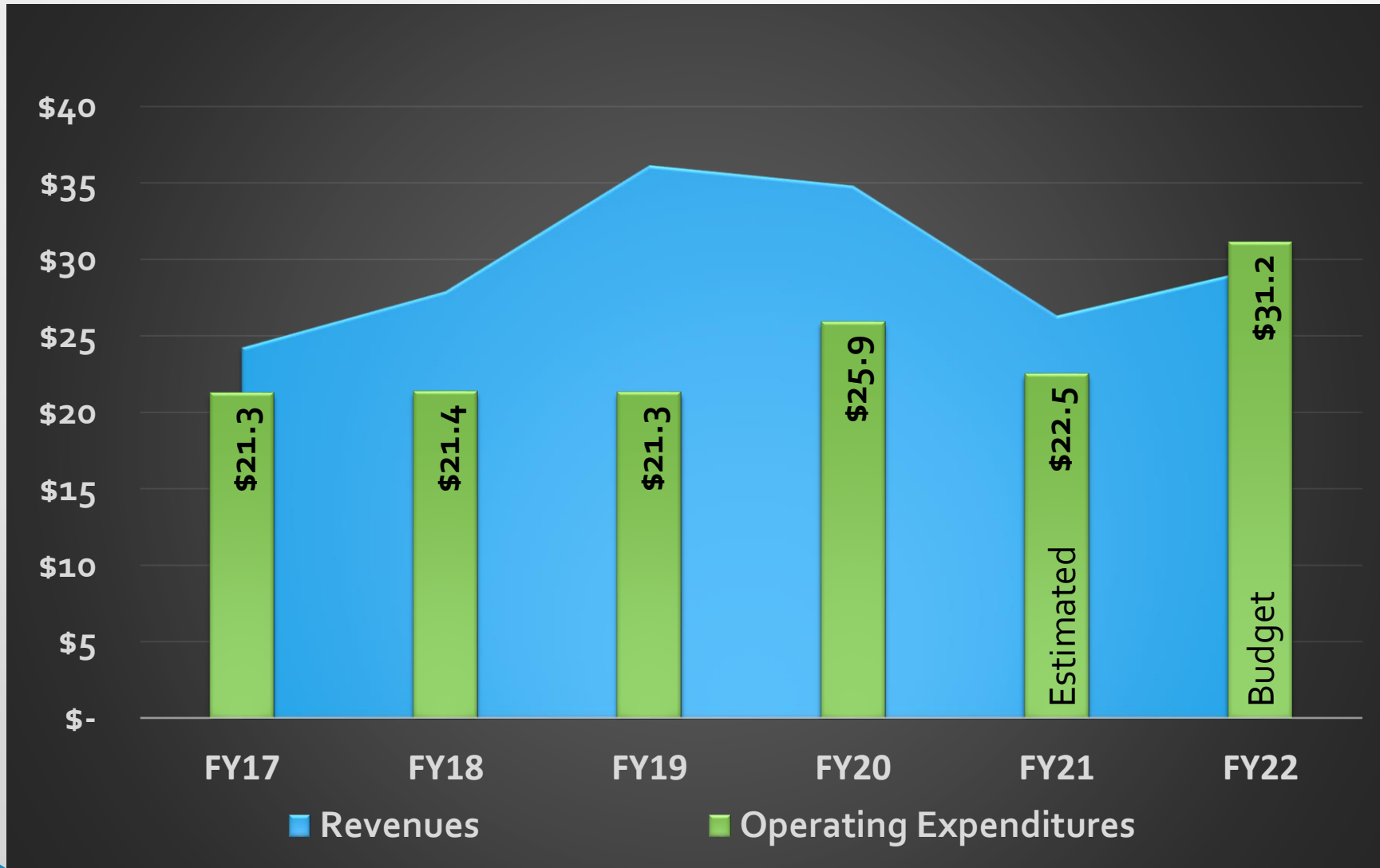
Building Department Income Statement For the Six Months Ended

(in millions)

	Dec. 2020	Dec. 2019	Dec. 2018
Revenues	\$ 12.69	\$ 13.79	\$ 22.13
Expenses	<u>11.33</u>	<u>12.58</u>	<u>10.55</u>
Operating Income	\$ 1.36	\$ 1.21	\$ 11.58

Revenue vs. Expenses

(in millions)



Working Capital

(in millions)

	Dec. 2020	June 2020	June 2019
Current Assets	\$ 66.1	\$ 66.24	\$ 57.75
Less: Designated Cash	<u>(24.55)</u>	<u>(24.55)</u>	<u>(24.55)</u>
Unrestricted Current Assets	41.60	41.68	38.45
Current Liabilities	<u>(20.20)</u>	<u>(20.97)</u>	<u>(21.78)</u>
Working Capital	21.40	20.72	11.41
50% Operating Expenses ⁽¹⁾	<u>(16.40)</u>	<u>(15.88)</u>	<u>(14.92)</u>
Working Capital Excess (Deficiency)	\$ 5.00	\$ 4.84	(\$ 3.51)

⁽¹⁾ December 2020 based on FY21 budgeted expenses

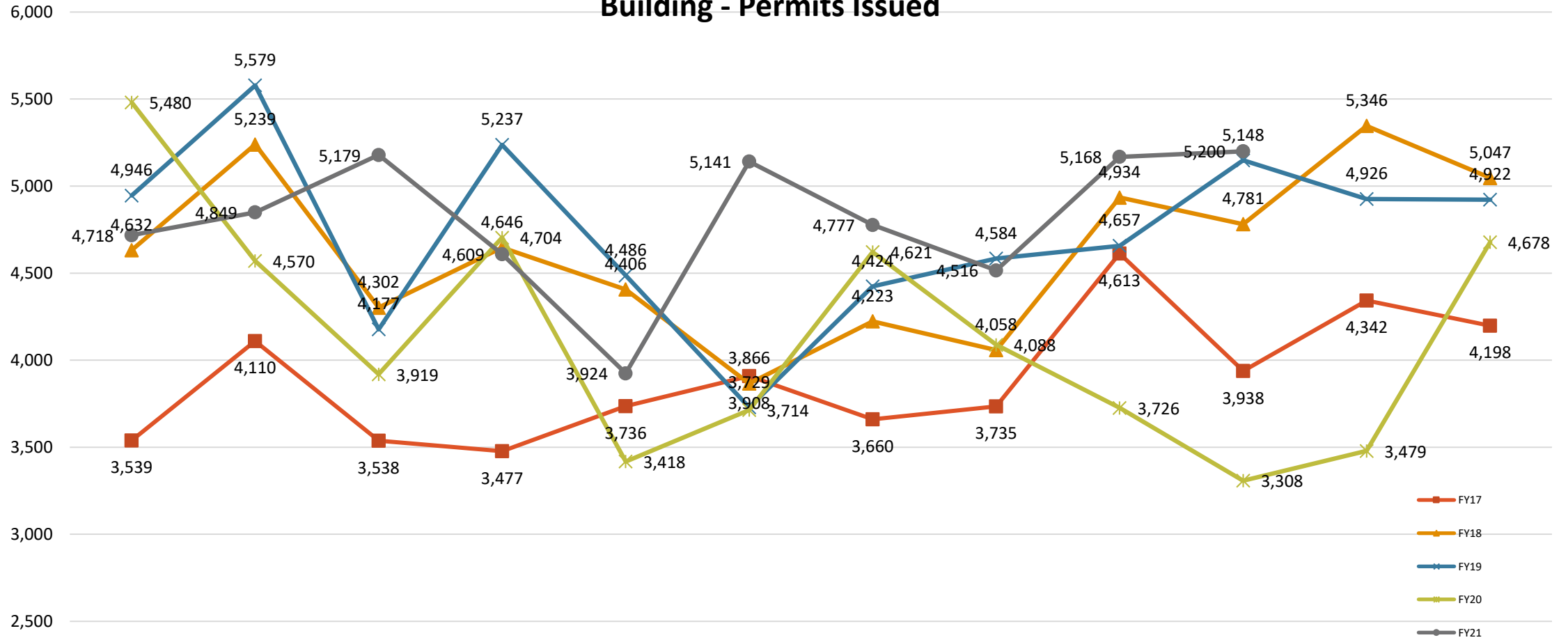
Building Department Unearned Revenue

Permit Holder	March 31, 2021
Fountainbleau	\$ 3,545,547
MSG (sphere)	3,629,592
Resorts World	2,535,883
The Arch Apartments	306,348
Switch Communication	155,153
Bellagio Hotel & Casino	136,987
< \$100,000	<u>\$ 6,444,077</u>
Total Unearned Revenue	\$ 16,753,587

PERFORMANCE DATA

PERMITS ISSUED

Building - Permits Issued

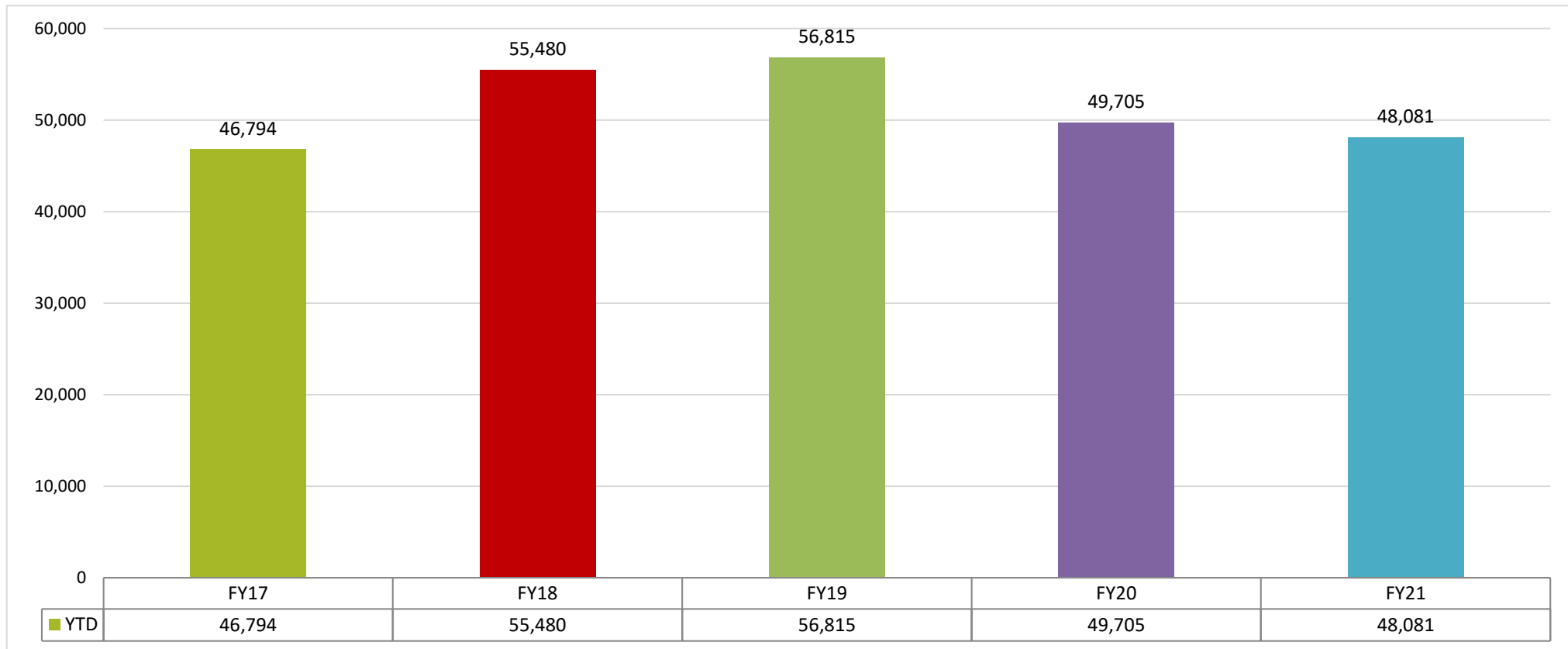


	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY17	3,539	4,110	3,538	3,477	3,736	3,908	3,660	3,735	4,613	3,938	4,342	4,198
FY18	4,632	5,239	4,302	4,646	4,406	3,866	4,223	4,058	4,934	4,781	5,346	5,047
FY19	4,946	5,579	4,177	5,237	4,486	3,729	4,424	4,584	4,657	5,148	4,926	4,922
FY20	5,480	4,570	3,919	4,704	3,418	3,714	4,621	4,088	3,726	3,308	3,479	4,678
FY21	4,718	4,849	5,179	4,609	3,924	5,141	4,777	4,516	5,168	5,200		

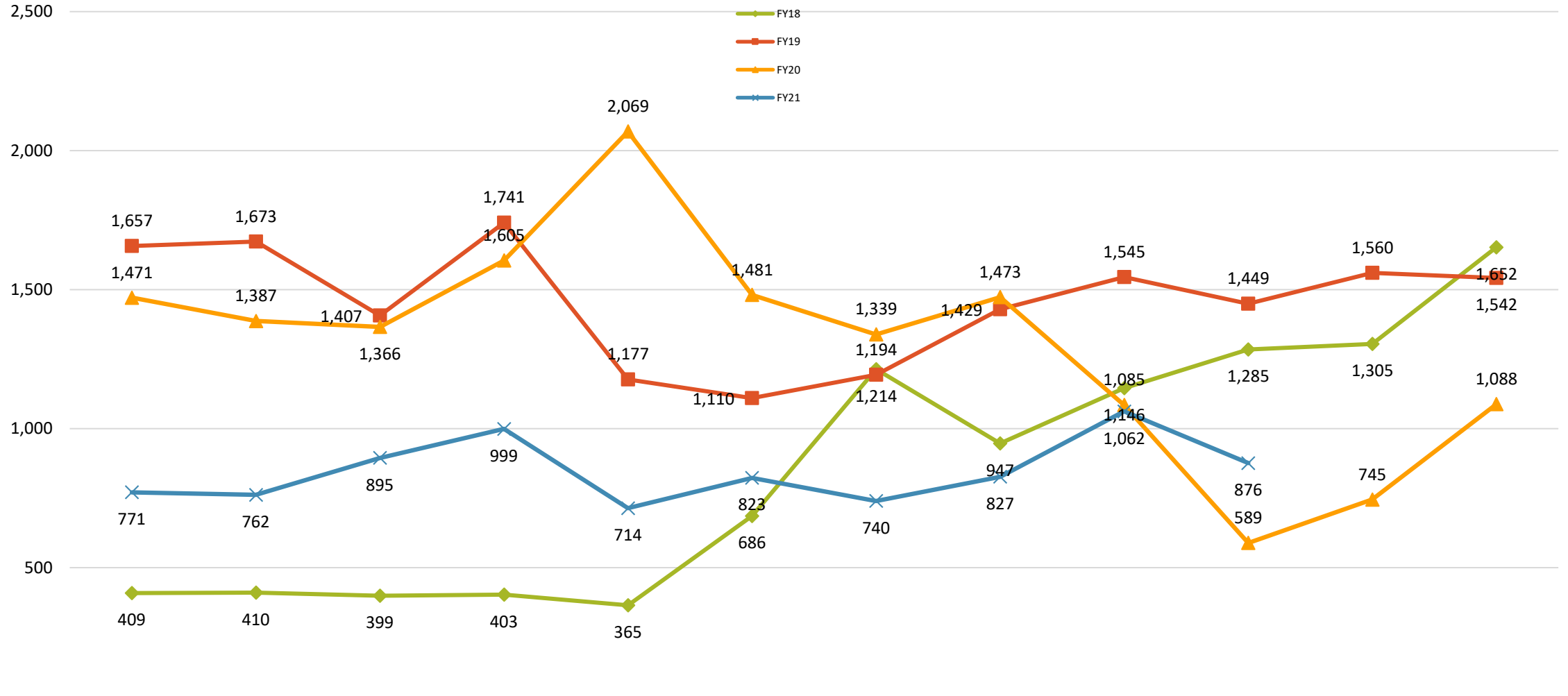
Building Permits Issued - Fiscal Year Comparison

Through April 2021

	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	YTD
FY17	3,539	4,110	3,538	3,477	3,736	3,908	3,660	3,735	4,613	3,938	4,342	4,198	46,794
FY18	4,632	5,239	4,302	4,646	4,406	3,866	4,223	4,058	4,934	4,781	5,346	5,047	55,480
FY19	4,946	5,579	4,177	5,237	4,486	3,729	4,424	4,584	4,657	5,148	4,926	4,922	56,815
FY20	5,480	4,570	3,919	4,704	3,418	3,714	4,621	4,088	3,726	3,308	3,479	4,678	49,705
FY21	4,718	4,849	5,179	4,609	3,924	5,141	4,777	4,516	5,168	5,200			48,081



Fire Prevention - Permits Issued

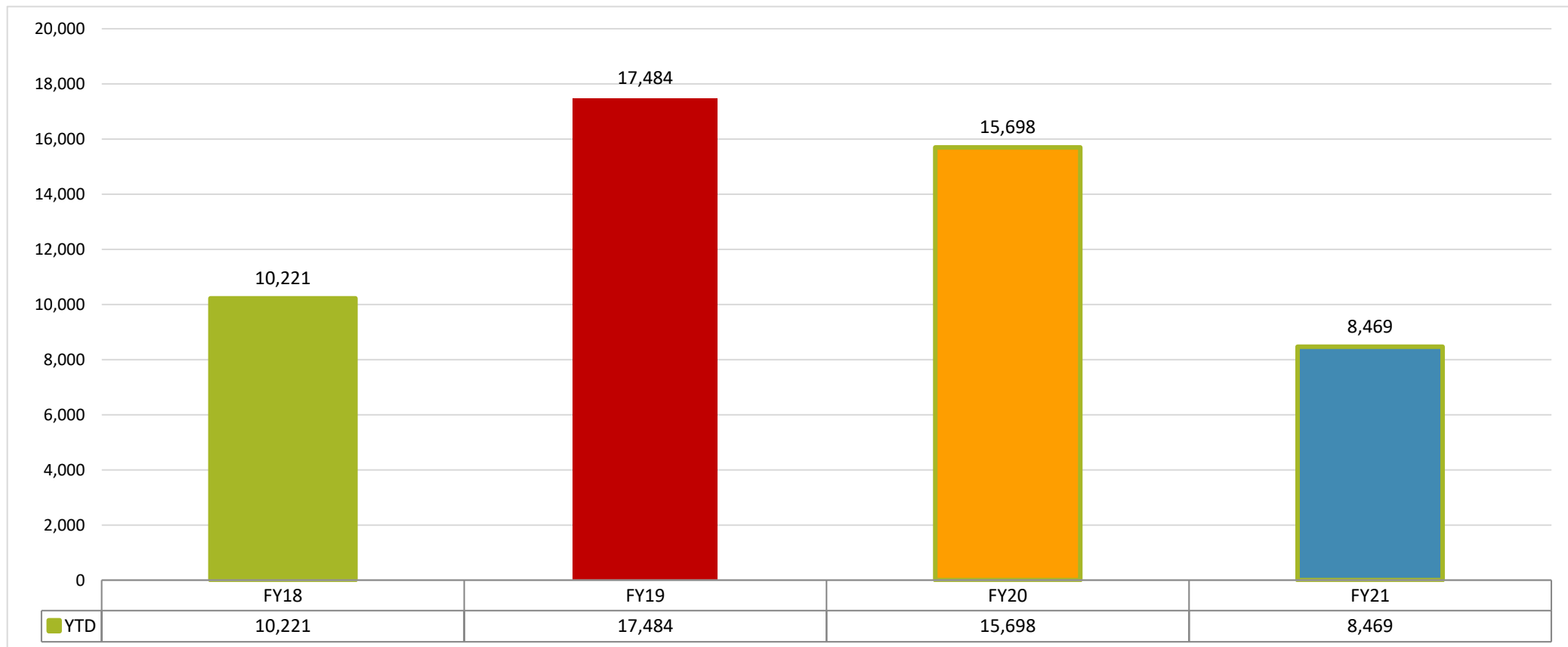


	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY18	409	410	399	403	365	686	1,214	947	1,146	1,285	1,305	1,652
FY19	1,657	1,673	1,407	1,741	1,177	1,110	1,194	1,429	1,545	1,449	1,560	1,542
FY20	1,471	1,387	1,366	1,605	2,069	1,481	1,339	1,473	1,085	589	745	1,088
FY21	771	762	895	999	714	823	740	827	1,062	876		

Fire Prevention Permits Issued - Fiscal Year Comparison

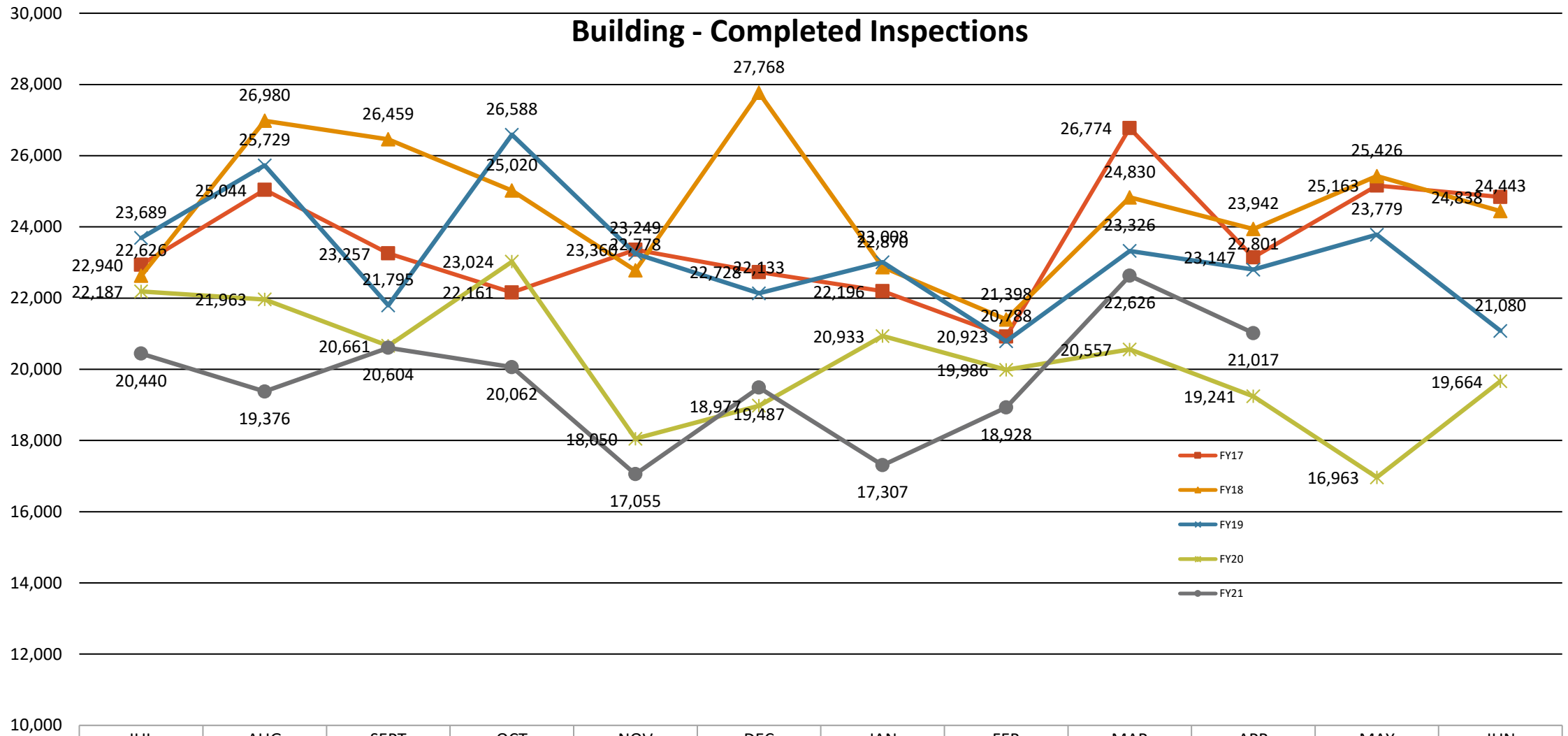
Through April 2021

	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	YTD
FY18	409	410	399	403	365	686	1,214	947	1,146	1,285	1,305	1,652	10,221
FY19	1,657	1,673	1,407	1,741	1,177	1,110	1,194	1,429	1,545	1,449	1,560	1,542	17,484
FY20	1,471	1,387	1,366	1,605	2,069	1,481	1,339	1,473	1,085	589	745	1,088	15,698
FY21	771	762	895	999	714	823	740	827	1,062	876			8,469



INSPECTIONS

Building - Completed Inspections

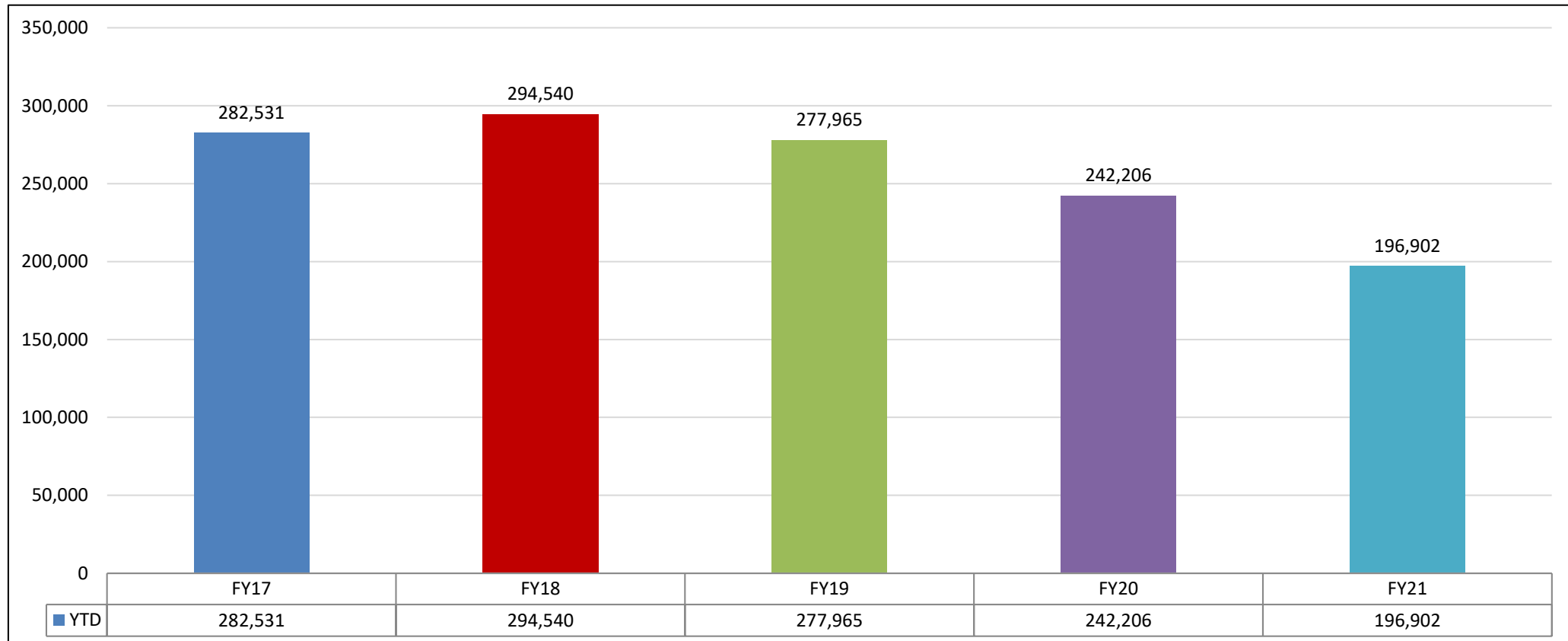


	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
■ FY17	22,940	25,044	23,257	22,161	23,360	22,728	22,196	20,923	26,774	23,147	25,163	24,838
▲ FY18	22,626	26,980	26,459	25,020	22,778	27,768	22,870	21,398	24,830	23,942	25,426	24,443
× FY19	23,689	25,729	21,795	26,588	23,249	22,133	23,008	20,788	23,326	22,801	23,779	21,080
✱ FY20	22,187	21,963	20,661	23,024	18,050	18,977	20,933	19,986	20,557	19,241	16,963	19,664
● FY21	20,440	19,376	20,604	20,062	17,055	19,487	17,307	18,928	22,626	21,017		

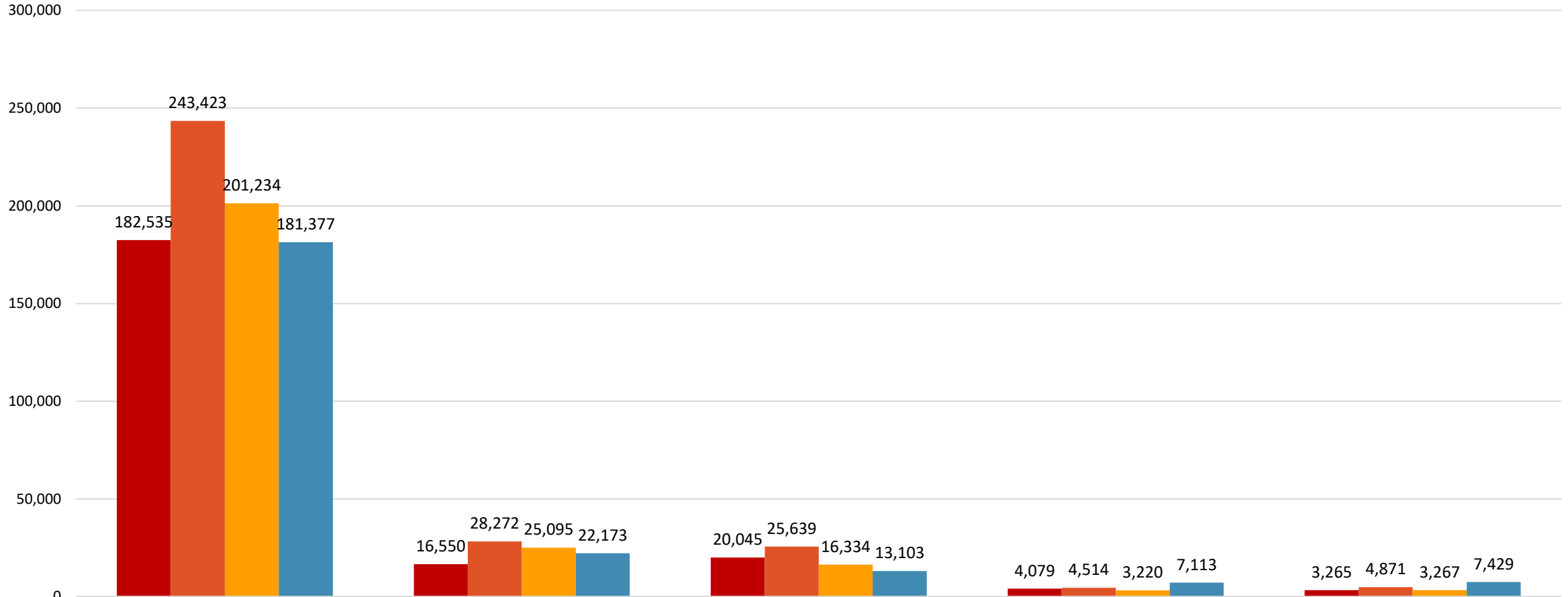
Building Completed Inspections- Fiscal Year Comparison

Through April 2021

	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	YTD
FY17	22,940	25,044	23,257	22,161	23,360	22,728	22,196	20,923	26,774	23,147	25,163	24,838	282,531
FY18	22,626	26,980	26,459	25,020	22,778	27,768	22,870	21,398	24,830	23,942	25,426	24,443	294,540
FY19	23,689	25,729	21,795	26,588	23,249	22,133	23,008	20,788	23,326	22,801	23,779	21,080	277,965
FY20	22,187	21,963	20,661	23,024	18,050	18,977	20,933	19,986	20,557	19,241	16,963	19,664	242,206
FY21	20,440	19,376	20,604	20,062	17,055	19,487	17,307	18,928	22,626	21,017			196,902

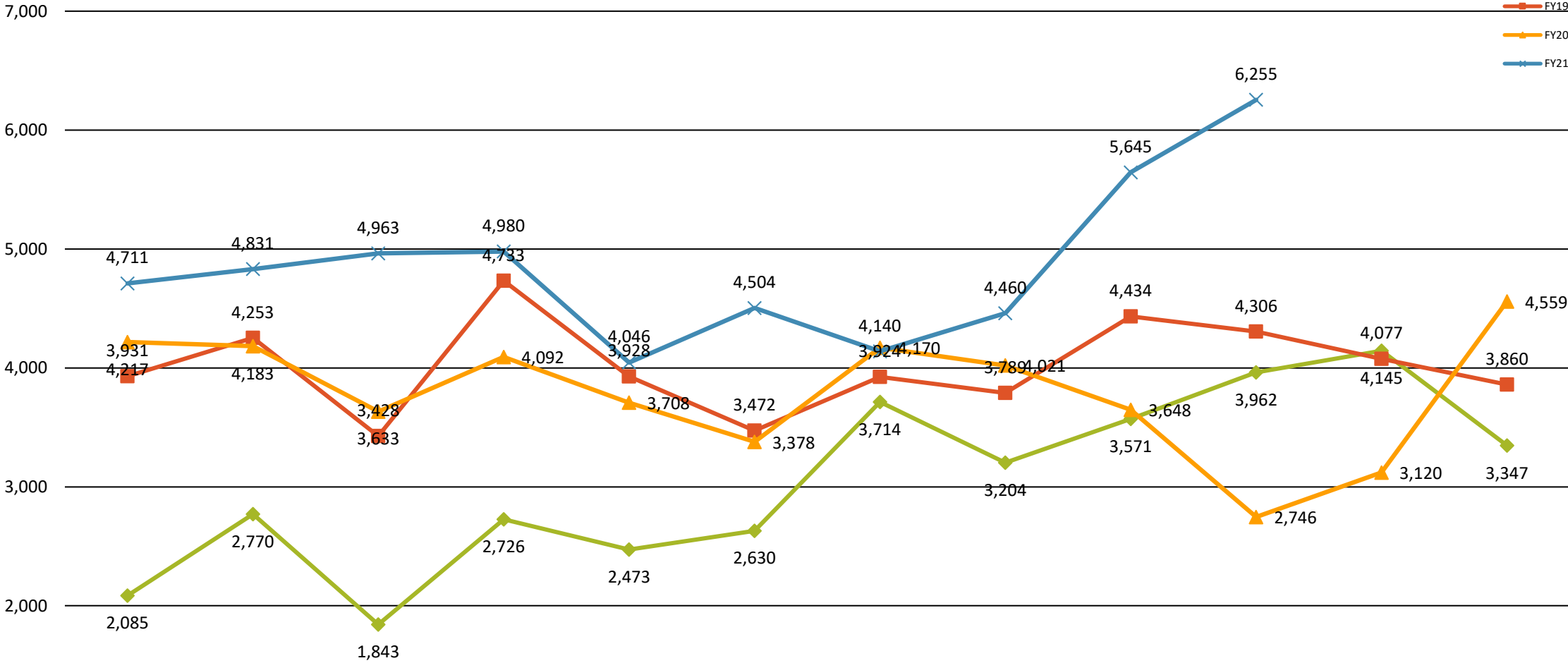


BUILDING INSPECTOR ACTIVITY



	Approved	Denied	Cancelled	Rollover	Others
FY18	182,535	16,550	20,045	4,079	3,265
FY19	243,423	28,272	25,639	4,514	4,871
FY20	201,234	25,095	16,334	3,220	3,267
FY21	181,377	22,173	13,103	7,113	7,429

Fire Prevention - Completed Inspections

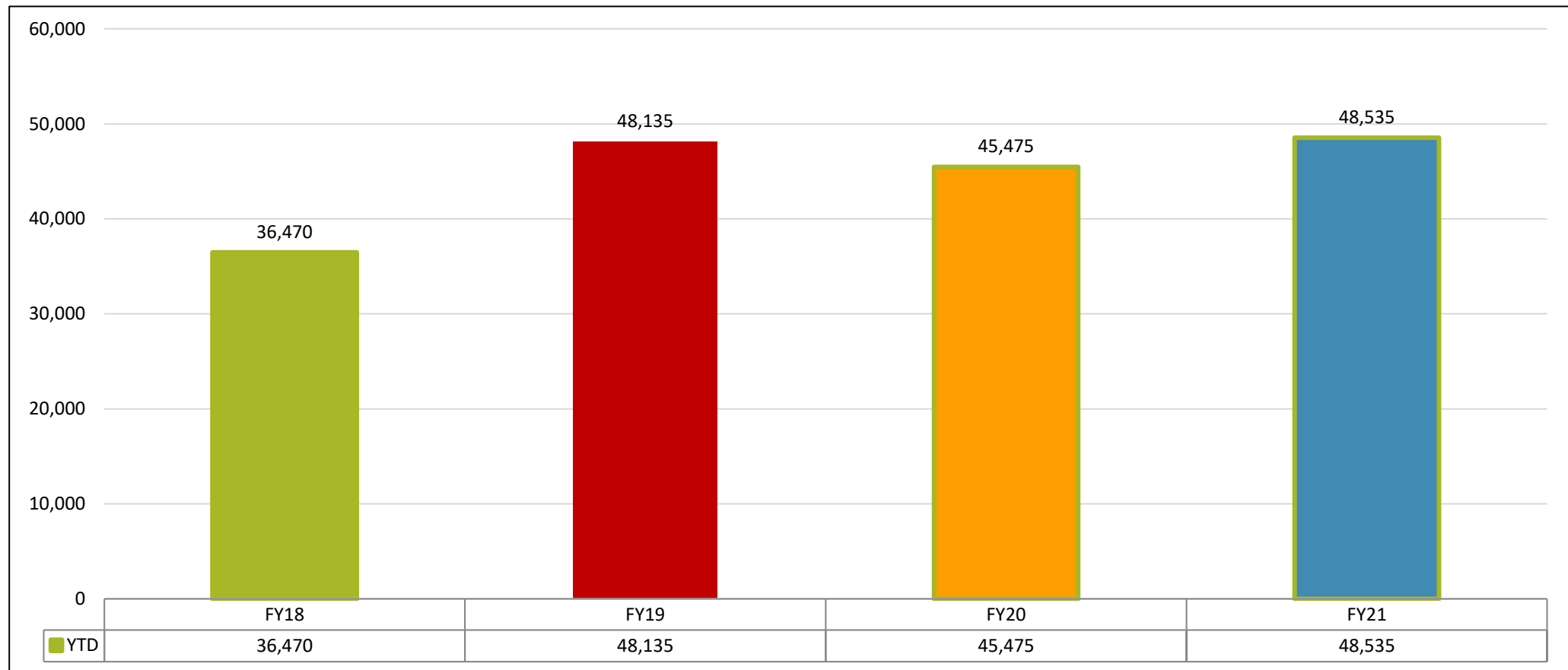


	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY18	2,085	2,770	1,843	2,726	2,473	2,630	3,714	3,204	3,571	3,962	4,145	3,347
FY19	3,931	4,253	3,428	4,733	3,928	3,472	3,924	3,789	4,434	4,306	4,077	3,860
FY20	4,217	4,183	3,633	4,092	3,708	3,378	4,170	4,021	3,648	2,746	3,120	4,559
FY21	4,711	4,831	4,963	4,980	4,046	4,504	4,140	4,460	5,645	6,255		

Fire Prevention Completed Inspections- Fiscal Year Comparison

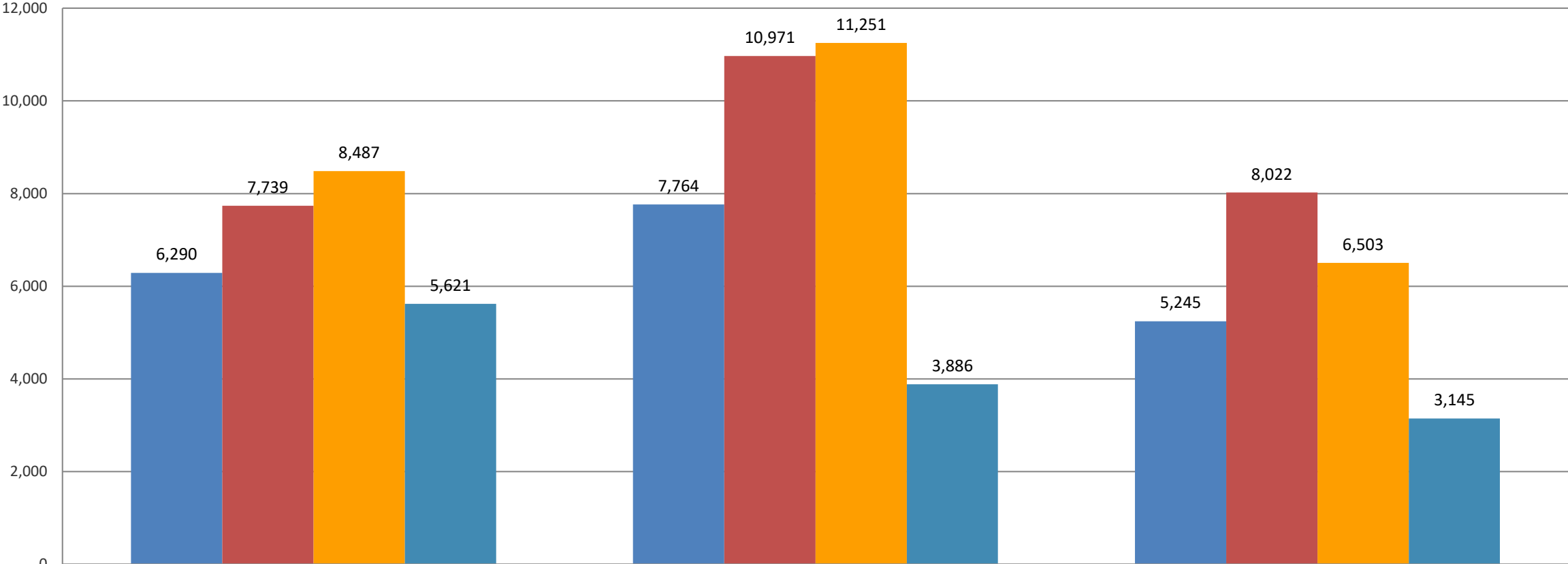
Through April 2021

	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	YTD
FY18	2,085	2,770	1,843	2,726	2,473	2,630	3,714	3,204	3,571	3,962	4,145	3,347	36,470
FY19	3,931	4,253	3,428	4,733	3,928	3,472	3,924	3,789	4,434	4,306	4,077	3,860	48,135
FY20	4,217	4,183	3,633	4,092	3,708	3,378	4,170	4,021	3,648	2,746	3,120	4,559	45,475
FY21	4,711	4,831	4,963	4,980	4,046	4,504	4,140	4,460	5,645	6,255			48,535



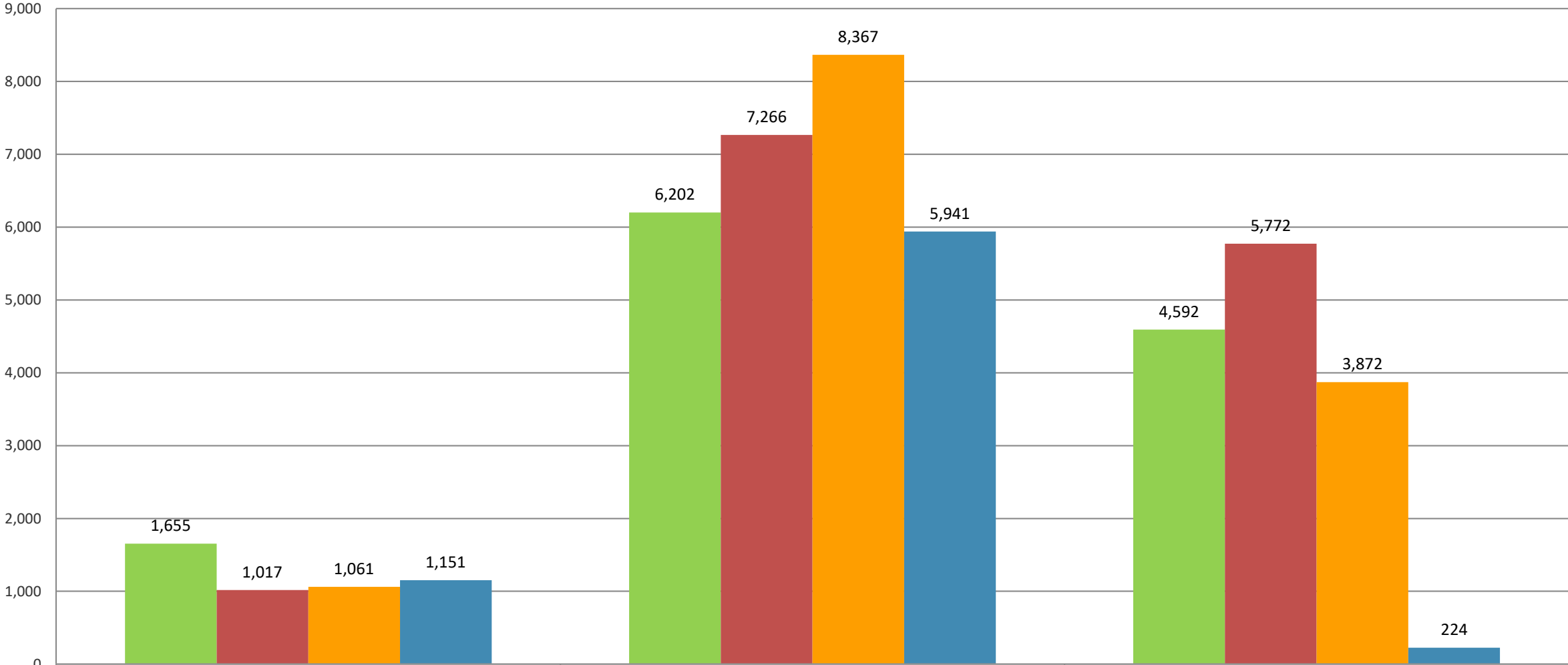
PLAN REVIEW

BUILDING PLAN REVIEW



	RESIDENTIAL	COMMERCIAL	REVISIONS
FY18	6,290	7,764	5,245
FY19	7,739	10,971	8,022
FY20	8,487	11,251	6,503
FY21	5,621	3,886	3,145

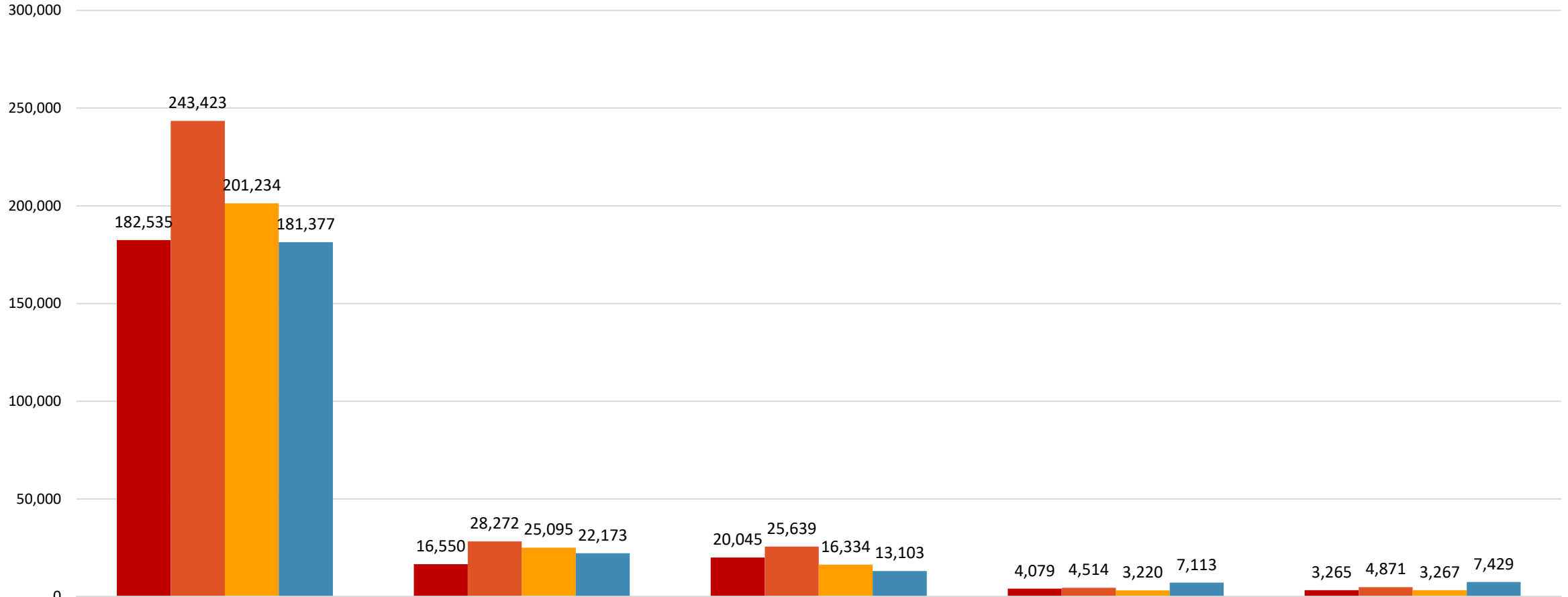
FIRE PREVENTION PLAN REVIEW



	Total Annual/Renewable Permit Plan Reviews	Total Construction Permit Plan Reviews	Temporary Permit Plan Reviews
FY18	1,655	6,202	4,592
FY19	1,017	7,266	5,772
FY20	1,061	8,367	3,872
FY21	1,151	5,941	224

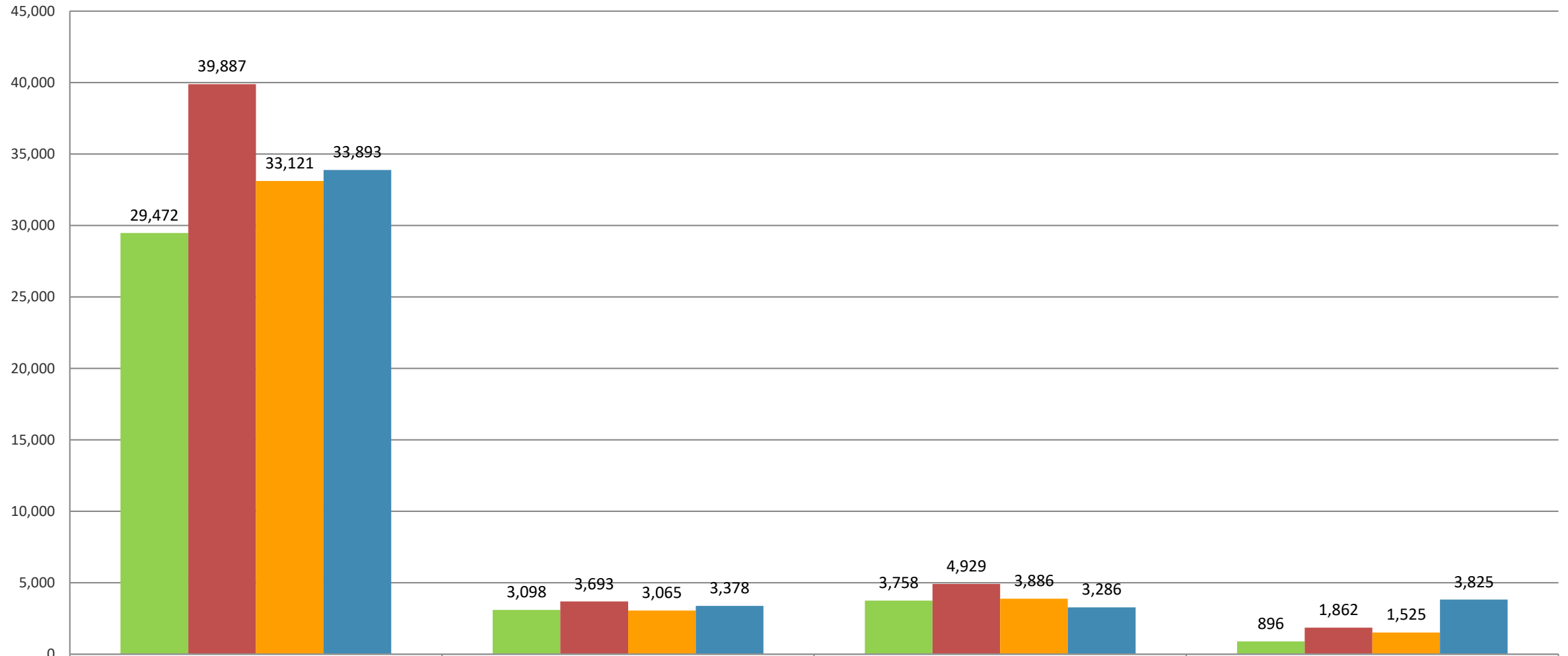
INSPECTOR ACTIVITY

BUILDING INSPECTOR ACTIVITY



	Approved	Denied	Cancelled	Rollover	Others
FY18	182,535	16,550	20,045	4,079	3,265
FY19	243,423	28,272	25,639	4,514	4,871
FY20	201,234	25,095	16,334	3,220	3,267
FY21	181,377	22,173	13,103	7,113	7,429

FIRE PREVENTION INSPECTOR ACTIVITY



	Approved	Denied	Cancelled	Others
FY18	29,472	3,098	3,758	896
FY19	39,887	3,693	4,929	1,862
FY20	33,121	3,065	3,886	1,525
FY21	33,893	3,378	3,286	3,825

STAFFING UPDATE

DEPARTMENT RECRUITMENTS:

- Current Recruitments: 19 positions
- Manager Engineering: Offer made, candidate is pending background
- Assistant Manager Plans Examination: Terry Kozlowski started 5/3/21
- 2 Senior Engineer/Architect: candidates successfully hired and scheduled to start on 5/17/21
- 3 Building Permit Specialist I/II: PARs submitted and awaiting approval
- 2 Building Plans Exam Specialist: Offer made, candidate is pending background for one position, second position open and under recruitment
- Administrative Secretary: in recruitment
- 3 Fire Inspector: interviews in progress
- Associate Engineer: recruitment ended; interviews set to be scheduled
- 5 Senior Building Inspector: PARs submitted and awaiting approval

DEPARTMENT VACANCIES:

Other Vacancies: 27 positions

- (1) Manager Plans Examination
- (1) Assistant Manager Plans Exam
- (1) Associate Engineer
- (2) Building Plans Exam Specialist
- (7) Senior Building Inspector
- (1) Building Inspector I/II
- (1) Office Services Manager
- (2) Building Plans Technician
- (2) Administrative Secretary
- (2) Recordation Technician
- (1) Financial Office Specialist
- (1) Office Services Aide
- (1) Fire Marshal
- (2) Senior Engineer/Architect
- (1) Administrative Specialist
- (1) Office Assistant II

CAPITAL IMPROVEMENTS

CAPITAL IMPROVEMENTS REQUESTS

The following capital projects were included in the BCC approved Department FY21 Budget and are presented to the BEFAC, for discussion and possible actions.

Employee Parking Lot LED Lighting	\$ 307,235
Lighting Control Panel Replacement	\$ 712,356
Exterior Waterproofing & Caulking Replacement	\$ 403,811
Exterior Break Area Fan & Lighting Replacement	\$ 40,455
Chiller 1 & 2 Replacement	\$ 1,714,622
Data Room A/C Addition	\$ 113,405
Interior Security Camera System Upgrade	\$ 288,359
Parking Lot Pavement Assessment	\$ 30,000
Total	\$ 3,610,243

b) Employee Parking Lot LED Lighting

PROJECT ELEMENT	SIZE	QUANTITY	UNIT COST	UNIT	ESTIMATE
I. Projected Construction Costs: A. Building and/or Site Development					
1. Parking Lot Lighting (Dual Fixture Pole): Furnish and install new pole mounted dual head LED fixtures and retrofit kits on existing steel poles. \$3,200/fixture material cost. Labor (2 elec x 3.5hrs at \$85/hr).		32	ea	\$3,850	\$123,200
2. Parking Lot Lighting (Single Fixture Pole): Furnish and install new pole mounted LED light fixtures and retrofit kits on existing steel poles. \$1,400/fixture material cost. Labor (2 elec x 2 hrs at \$85/hr).		6	ea	\$1,800	\$10,800
3. Carport Lighting: Furnish and install new undermount LED light fixtures and retrofits at carports. \$500/fixture material cost. Labor (1 elec x 2 hrs at \$85/hr).		26	ea	\$670	\$17,420
4. Dispose of old light fixtures.		96	ea	\$15	\$1,440
5. Equipment rental		30	days	\$195	\$5,850
6. Other: Contractors margins & adjustments (use 30-35% if not included in construction line items above)		35%	%	\$158,710	\$55,549
I. Projected Construction Costs: B. Specialty and/or Unique Projects Requirements:					
1. Pioneer/extend Utilities to project site boundaries:		C. Sewer Service Pioneering:		\$0	\$0
A. Electric Service Pioneering:		D. Gas Service Pioneering:		\$0	\$0
B. Water Service Pioneering:		E. Telephone/Cable/Fiber Service Pioneering:		\$0	\$0
2. Computer / Telephone / Alarm System and/or CCTV Cabling ; Terminations / Wall plugs and/or mountboards: (Cabling to the site and interior to parcels and buildings (\$15,000 small facility, \$30,000 medium facility, \$60,000 large facility)					
3. Accessibility Path of Travel upgrades for alterations					
4. Other (Specify)					
Estimated Project Construction Cost					\$214,259
I. Projected Construction Costs: C. Estimated Out of Urban Area Construction Cost Differential					0.0000%
ADJUSTED PROJECT CONSTRUCTION COST ESTIMATE					\$214,259
II. Professional Service Fees					
A. Professional Service Fees (A/E Contract): Planning / Design / Sub Consultants / Construction Documents / Specifications / Bid Preparation / Bidding Assistance / Basic Services of Contract Administration / Work Product					
					18.0000%
					\$38,567
B. Reports / Studies / Owner Expense / Deliverables (A/E Contract):					
		Other:	\$0	Cost Estimator (3rd Party)	\$1,500
Reimbursement of Consultant Paid Owner Expenses		\$500	Traffic Study	\$0	Certified Scheduler
Topographic / Boundary Survey		\$0	Drainage Study	\$0	CD Bid Plan Sets
Engineering Report (Civil, Structural, MPE)		\$3,500	Geotechnical Report	\$0	Construction Plan Sets
Other - specify (Landscape, Interior Design etc.)		\$0	Subsurface Utility Engineering	\$0	Design Contingency (10%)
					\$3,857
C. Project Management / Construction Management / Construction Inspection / Pre-planning Costs / Extended CA					
					3.0000%
					\$6,428
Estimated Professional Service Fees (A/E Contract)					\$54,551
D. Reports / Studies / 3rd Party Consultants (Owner Items):					
ACM Testing & Report		\$0	Commissioning	\$0	System Furniture Design:
Registered Roofing Consultant (RRC)		\$0	Quality Assurance Agency	\$0	Other (In House Design)
					\$1,500
					\$0
					\$1,500
Estimated Professional Service Fees (Owner Items)					\$1,500
Total Estimated Professional Service Fees					\$56,051
II. Professional Service Fees: Estimated Out of Urban Area Cost Differential					0.0000%
ADJUSTED PROFESSIONAL SERVICE FEES AND CHARGES					\$56,051
III. Project Construction Contingency (To be used for unforeseen conditions; Does not increase Scope of Work)					
					10.0000%
					\$21,426
IV. Permits & Fees (Contractor)					
V. Real property Management Fee:					
A. \$00,001-\$50,000 Estimated project cost:		\$2,500 Fee	C. \$350,001-\$1,000,000 Estimated project cost:		\$30,000 Fee
B. \$50,001-\$350,000 Estimated project cost:		\$15,000 Fee	D. \$1,000,001-\$3,000,000 Estimated project cost:		\$100,000 Fee
			E. Over \$3,000,000 Estimated project cost:		\$150,000 Fee
VI. Utility Application and Connection Fees: (Water, Sewer, Nevada Power meter and inspection)					
A. Water Application & Connection Fees		\$0	C. Power Application & Connection Fees		\$0
B. Sewer Application & Connection Fees		\$0	D. Other:		\$0
VII. Building Fixtures and Hardware					
A. Modular Work Station Unit					
		0	units	\$5,200	per unit
					\$0
B. Telephone System Equipment:					
		0	units	\$325	per unit
					\$0
C. Router with Switch and racks: (\$20,000 - up to 24 users; \$75,000 - up to 96 users); (48-port \$10,000; 24-port \$5,800)					
D. UPS System: (Small - \$ 15,000; Large - \$35,000)					
E. Server (if required - \$31,500)					
F. Registered Cabling Design / Engineering Service					
		0	Man Hours	\$80	per hour
					\$0
G. Wi-Fi System with conduits (One device per 2000 s.f.)					
		0	ea	\$5,000	per each
					\$0
H. General & Specialized Relocation: Packing and Moving (Regular time \$54.00/hr)					
		0	Man Hours	\$54	per hour
					\$0
I. Other (Specify)					
		0	unit (specify)	\$0	per(specify)
					\$0
SUBTOTAL BUILDING FIXTURES & HARDWARE					\$0
2020 / 2021 SUBTOTAL OF ESTIMATED DESIGN & CONSTRUCTION COSTS MANAGED BY RPM					\$307,235
VIII. FF & E (Free-Standing Furniture & Computers)					
A. Facility: (Free-Standing Furnishings and Computer Equipment)					
		0	s.f.	\$20	per s.f.
					\$0
B. Computer with Printer and Software					
		0	units	\$4,500	per unit
					\$0
C. Alarm System Service (First Year)					
		0	system	\$13,500	per system
					\$0
D. Other (specify)					
		0	unit	\$0	unit
					\$0
IX. Outreach: Departmental Project Notification and Publicity Requirements; Ground Breaking and Project Dedication					
2020 / 2021 SUBTOTAL OF ESTIMATED FREE-STANDING FURNITURE, COMPUTERS AND OUTREACH COSTS					\$0
2020 / 2021 TOTAL ESTIMATED PROJECT COSTS FOR BUDGET PURPOSES					\$307,235

c) Lighting Control Panel Replacement

PROJECT ELEMENT	SIZE	AREA or QUANTITY	PROJECTED UNIT COST	UNIT	COST ESTIMATE
I. Projected Construction Costs: A. Building and/or Site Development					
1. Building Construction: Remove and replace existing Lithonia Synergy lighting control system throughout the facility. Includes removal and replacement of lighting relay control panels #1-7 with new upgraded panels, network master panel, network gateway, enclosures, control stations and power modules including new control software, installation, testing and commissioning. Remove and replace all light switches and occupancy sensors throughout the facility for upgraded controls with new control panels. Reference OCMi rough order of magnitude estimate dated 1/19/2021.	1	I.s.	\$474,738	I.s.	\$474,738
2. Land Construction: (Parking, Site Improvements, Landscaping)	0	acres	\$500,000	acres	\$0
3. Off-site Construction: Off-site Construction with Signalization	0	lin. ft.	\$0	per lin. ft.	\$0
4. Other: Night shift work premium. Not included in OCMi ROM.	10%	%	\$474,738	I.s.	\$47,474
I. Projected Construction Costs: B. Specialty and/or Unique Projects Requirements:					
1. Pioneer/extend Utilities to project site boundaries:	C. Sewer Service Pioneering:		\$0		
A. Electric Service Pioneering:	\$0	D. Gas Service Pioneering:	\$0		\$0
B. Water Service Pioneering:	\$0	E. Telephone/Cable/Fiber Service Pioneering:	\$0		
2. Computer / Telephone / Alarm System and/or CCTV Cabling ; Terminations / Wall plugs and/or mountboards: (Cabling to the site and interior to parcels and buildings (\$15,000 small facility; \$30,000 medium facility; \$60,000 large facility)					\$0
3. Accessibility Path of Travel upgrades for alterations					\$0
4. Other (Specify)					\$0
Estimated Project Construction Cost					\$522,212
I. Projected Construction Costs: C. Estimated Out of Urban Area Construction Cost Differential					0.0000%
					\$0
ADJUSTED PROJECT CONSTRUCTION COST ESTIMATE					\$522,212
II. Professional Service Fees					
A. Professional Service Fees (A/E Contract): Planning / Design / Sub Consultants / Construction Documents / Specifications / Bid Preparation / Bidding Assistance / Basic Services of Contract Administration / Work Product				12.0000%	\$62,665
B. Reports / Studies / Owner Expense / Deliverables (A/E Contract):					
Reimbursement of Consultant Paid Owner Expenses	\$1,075	Traffic Study	\$0	Certified Scheduler	\$3,500
Topographic / Boundary Survey	\$0	Drainage Study	\$0	CD Bid Plan Sets	\$50
Engineering Report (Civil, Structural, MPE)	\$7,500	Geotechnical Report	\$0	Construction Plan Sets	\$500
Other - specify (Landscape, Interior Design etc.)	\$0	Subsurface Utility Engineering	\$0	Design Contingency (10%)	\$6,267
C. Project Management / Construction Management / Construction Inspection / Pre-planning Costs / Extended CA				3.0000%	\$15,686
Estimated Professional Service Fees (A/E Contract)					\$100,723
D. Reports / Studies / 3rd Party Consultants (Owner Items):					
ACM Testing & Report	\$0	Commissioning	\$500	System Furniture Design:	\$0
Registered Roofing Consultant (RRC)	\$0	Quality Assurance Agency	\$0	Other (In House Design)	\$0
				Scheduling/Estimating	\$5,000
Estimated Professional Service Fees (Owner Items)					\$5,500
Total Estimated Professional Service Fees					\$106,223
II. Professional Service Fees: Estimated Out of Urban Area Cost Differential					0.0000%
					\$0
ADJUSTED PROFESSIONAL SERVICE FEES AND CHARGES					\$106,223
III. Project Construction Contingency (To be used for unforeseen conditions; Does not increase Scope of Work)					10.0000%
					\$52,221
IV. Permits & Fees (Contractor)					\$1,700
V. Real property Management Fee:					
A. \$00,001-\$50,000 Estimated project cost:	\$2,500 Fee	C. \$350,001-\$1,000,000 Estimated project cost:	\$30,000 Fee		
B. \$50,001-\$350,000 Estimated project cost:	\$15,000 Fee	D. \$1,000,001-\$3,000,000 Estimated project cost:	\$100,000 Fee		\$30,000
		E. Over \$3,000,000 Estimated project cost:	\$150,000 Fee		
VI. Utility Application and Connection Fees: (Water, Sewer, Nevada Power meter and inspection)					
A. Water Application & Connection Fees	\$0	C. Power Application & Connection Fees	\$0		\$0
B. Sewer Application & Connection Fees	\$0	D. Other:	\$0		\$0
VII. Building Fixtures and Hardware					
A. Modular Work Station Unit	0	units	\$5,200	per unit	\$0
B. Telephone System Equipment:	0	units	\$325	per unit	\$0
C. Router with Switch and racks: (\$20,000 - up to 24 users; \$75,000 - up to 96 users); (48-port \$10,000; 24-port \$5,800)					\$0
D. UPS System: (Small - \$ 15,000; Large - \$35,000)					\$0
E. Server (if required - \$31,500)					\$0
F. Registered Cabling Design / Engineering Service	0	Man Hours	\$80	per hour	\$0
G. Wi-Fi System with conduits (One device per 2000 s.f.)	0	ea	\$5,000	per each	\$0
H. General & Specialized Relocation: Packing and Moving (Regular time \$54.00/hr)	0	Man Hours	\$54	per hour	\$0
I. Other (Specify)	0	unit (specify)	\$0	per(specify)	\$0
SUBTOTAL BUILDING FIXTURES & HARDWARE					\$0
2020 / 2021 SUBTOTAL OF ESTIMATED DESIGN & CONSTRUCTION COSTS MANAGED BY RPM					\$712,356
VIII. FF & E (Free-Standing Furniture & Computers)					
A. Facility: (Free-Standing Furnishings and Computer Equipment)	0	s.f.	\$20	per s.f.	\$0
B. Computer with Printer and Software	0	units	\$4,500	per unit	\$0
C. Alarm System Service (First Year)	0	system	\$13,500	per system	\$0
D. Other (specify)	0	unit	\$0	unit	\$0
IX. Outreach: Departmental Project Notification and Publicity Requirements; Ground Breaking and Project Dedication					
2020 / 2021 SUBTOTAL OF ESTIMATED FREE-STANDING FURNITURE, COMPUTERS AND OUTREACH COSTS					\$0
2020 / 2021 TOTAL ESTIMATED PROJECT COSTS FOR BUDGET PURPOSES					\$712,356

d) Exterior Waterproofing & Caulking Replacement

PROJECT ELEMENT	SIZE	AREA or QUANTITY	PROJECTED UNIT COST	UNIT	COST ESTIMATE	
I. Projected Construction Costs: A. Building and/or Site Development						
1. General Requirements: Site supervision, temporary controls, clean up etc. for the replacement of joint sealant in the exterior curtain wall system, fixed windows and joints between these systems and surrounding conditions.						
	5%	%	\$192,210	l.s.	\$9,611	
2. Telescopic Boom/Rental	8	WKS	\$2,275	per week	\$18,200	
3. Scissor Lift/Rental	8	WKS	\$1,850	per week	\$14,800	
4. Miscellaneous Equipment-Ladders, Scaffold, etc. (Ground crew)	8	WKS	\$1,200	per week	\$9,600	
5. Caulking-Seal Openings (Labor/Telescopic Boom) (2 Each @ \$65/hr)	8	WKS	\$5,200	per week	\$41,600	
6. Caulking-Seal Openings (Labor/Scissors Lift) (2 Each @ \$55/hr)	8	WKS	\$4,400	per week	\$35,200	
7. Caulking-Seal Openings (Labor/Ground Crew) (2 Each @ \$55/hr)	8	WKS	\$4,400	per week	\$35,200	
8. Caulking-Sealant Materials and Tools (estimated at 4,700 linear feet for all doors, windows, vertical and horizontal joints + 20% contingency = 5,640 linear feet)	5640	lin. FT.	\$6.25	per lin. FT.	\$35,250	
9. Miscellaneous Materials	8	WKS	\$295	per week	\$2,360	
10. Other: Contractors margins & adjustments (use 30-35% if not included in construction line items above)	35%	%	\$192,210	l.s.	\$67,274	
I. Projected Construction Costs: B. Specialty and/or Unique Projects Requirements:						
1. Pioneer/extend Utilities to project site boundaries:						
A. Electric Service Pioneering:		\$0	C. Sewer Service Pioneering:		\$0	
B. Water Service Pioneering:		\$0	D. Gas Service Pioneering:		\$0	
			E. Telephone/Cable/Fiber Service Pioneering:		\$0	
2. Computer / Telephone / Alarm System and/or CCTV Cabling ; Terminations / Wall plugs and/or mountboards: (Cabling to the site and interior to parcels and buildings (\$15,000 small facility; \$30,000 medium facility; \$60,000 large facility)						
					\$0	
3. Accessibility Path of Travel upgrades for alterations						
					\$0	
4. Other (Specify)						
					\$0	
Estimated Project Construction Cost					\$269,094	
I. Projected Construction Costs: C. Estimated Out of Urban Area Construction Cost Differential					0.0000%	
					\$0	
ADJUSTED PROJECT CONSTRUCTION COST ESTIMATE					\$269,094	
II. Professional Service Fees						
A. Professional Service Fees (A/E Contract): Planning / Design / Sub Consultants / Construction Documents / Specifications / Bid Preparation / Bidding Assistance / Basic Services of Contract Administration / Work Product						
					13.0000%	
					\$34,982	
B. Reports / Studies / Owner Expense / Deliverables (A/E Contract):						
Reimbursement of Consultant Paid Owner Expenses		\$500	Traffic Study	\$0	Certified Scheduler	\$2,500
Topographic / Boundary Survey		\$0	Drainage Study	\$0	CD Bid Plan Sets	\$50
Engineering Report (Civil, Structural, MPE)		\$3,500	Geotechnical Report	\$0	Construction Plan Sets	\$250
Other - specify (Landscape, Interior Design etc.)		\$0	Subsurface Utility Engineering	\$0	Design Contingency (10%)	\$3,498
					\$13,798	
C. Project Management / Construction Management / Construction Inspection / Pre-planning Costs / Extended CA						
					3.0000%	
					\$8,073	
Estimated Professional Service Fees (A/E Contract)					\$66,853	
D. Reports / Studies / 3rd Party Consultants (Owner Items):						
ACM Testing & Report		\$3,500	Constructability Review (NRS required for >\$10M) 1-2%	\$0	System Furniture Design:	\$0
Registered Roofing Consultant (RRC)		\$0	Commissioning	\$0	Other (In House Design)	\$0
			Quality Assurance Agency	\$2,500	Scheduling/Estimating	\$1,500
					\$7,500	
Estimated Professional Service Fees (Owner Items)					\$7,500	
Total Estimated Professional Service Fees					\$64,353	
II. Professional Service Fees: Estimated Out of Urban Area Cost Differential					0.0000%	
					\$0	
ADJUSTED PROFESSIONAL SERVICE FEES AND CHARGES					\$64,353	
III. Project Construction Contingency (To be used for unforeseen conditions; Does not increase Scope of Work)					15.0000%	
					\$40,364	
IV. Permits & Fees (Contractor)						
V. Real property Management Fee:						
A. \$00,001-\$50,000 Estimated project cost:		\$2,500 Fee	C. \$350,001-\$1,000,000 Estimated project cost:		\$30,000 Fee	
B. \$50,001-\$350,000 Estimated project cost:		\$15,000 Fee	D. \$1,000,001-\$3,000,000 Estimated project cost:		\$100,000 Fee	
			E. Over \$3,000,000 Estimated project cost:		\$150,000 Fee	
					\$30,000	
VI. Utility Application and Connection Fees: (Water, Sewer, Nevada Power meter and inspection)						
A. Water Application & Connection Fees		\$0	C. Power Application & Connection Fees		\$0	
B. Sewer Application & Connection Fees		\$0	D. Other:		\$0	
VII. Building Fixtures and Hardware						
A. Modular Work Station Unit						
	0	units	\$5,200	per unit	\$0	
B. Telephone System Equipment:						
	0	units	\$325	per unit	\$0	
C. Router with Switch and racks: (\$20,000 - up to 24 users; \$75,000 - up to 96 users); (48-port \$10,000; 24-port \$5,800)						
					\$0	
D. UPS System: (Small - \$ 15,000; Large - \$35,000)						
					\$0	
E. Server (if required - \$31,500)						
					\$0	
F. Registered Cabling Design / Engineering Service						
	0	Man Hours	\$80	per hour	\$0	
G. Wi-Fi System with conduits (One device per 2000 s.f.)						
	0	ea.	\$5,000	per each	\$0	
H. General & Specialized Relocation: Packing and Moving (Regular time \$54.00/hr)						
	0	Man Hours	\$54	per hour	\$0	
I. Other (Specify)						
	0	unit (specify)	\$0	per(specify)	\$0	
SUBTOTAL BUILDING FIXTURES & HARDWARE					\$0	
2020 / 2021 SUBTOTAL OF ESTIMATED DESIGN & CONSTRUCTION COSTS MANAGED BY RPM					\$403,811	
VIII. FF & E (Free-Standing Furniture & Computers)						
A. Facility: (Free-Standing Furnishings and Computer Equipment)						
	0	s.f.	\$20	per s.f.	\$0	
B. Computer with Printer and Software						
	0	units	\$4,500	per unit	\$0	
C. Alarm System Service (First Year)						
	0	system	\$13,500	per system	\$0	
D. Other (specify)						
	0	unit	\$0	unit	\$0	
IX. Outreach: Departmental Project Notification and Publicity Requirements; Ground Breaking and Project Dedication						
					\$0	
2020 / 2021 SUBTOTAL OF ESTIMATED FREE-STANDING FURNITURE, COMPUTERS AND OUTREACH COSTS					\$0	
2020 / 2021 TOTAL ESTIMATED PROJECT COSTS FOR BUDGET PURPOSES					\$403,811	

e) Exterior Break Area Fan & Lighting Replacement

PROJECT ELEMENT	SIZE	AREA or QUANTITY	PROJECTED UNIT COST	UNIT	COST ESTIMATE	
I. Projected Construction Costs: A. Building and/or Site Development						
1. Break Area: Remove and replace (7) exterior ceiling fans (62" fan with 4' extension pole; no light). Remove and replace (~25) ceiling mounted exterior light fixtures with new LED fixtures. Based on Annual Requirements Contract for Routine Electrical Work COFA pricing. Includes labor, materials and contractor's standard markups.	1	l.s.	\$30,165	l.s.	\$30,165	
2. Land Construction: (Parking, Site Improvements, Landscaping)	0	acres	\$500,000	acres	\$0	
3. Off-site Construction: Off-site Construction with Signalization	0	lin. ft.	\$0	per lin. ft.	\$0	
4. Other: Contractors margins & adjustments (use 30-35% if not included in construction line items above)	0%	%	\$30,165	l.s.	\$0	
I. Projected Construction Costs: B. Specialty and/or Unique Projects Requirements:						
1. Pioneer/extend Utilities to project site boundaries:		C. Sewer Service Pioneering:		\$0	\$0	
A. Electric Service Pioneering:	\$0	D. Gas Service Pioneering:		\$0		
B. Water Service Pioneering:	\$0	E. Telephone/Cable/Fiber Service Pioneering:		\$0		
2. Computer / Telephone / Alarm System and/or CCTV Cabling ; Terminations / Wall plugs and/or mountboards: (Cabling to the site and interior to parcels and buildings (\$15,000 small facility; \$30,000 medium facility; \$60,000 large facility)						
3. Accessibility Path of Travel upgrades for alterations						
4. Other (Specify)					\$0	
Estimated Project Construction Cost					\$30,165	
I. Projected Construction Costs: C. Estimated Out of Urban Area Construction Cost Differential					0.0000%	\$0
ADJUSTED PROJECT CONSTRUCTION COST ESTIMATE					\$30,165	
II. Professional Service Fees						
A. Professional Service Fees (A/E Contract): Planning / Design / Sub Consultants / Construction Documents / Specifications / Bid Preparation / Bidding Assistance / Basic Services of Contract Administration / Work Product					10.0000%	\$3,017
B. Reports / Studies / Owner Expense / Deliverables (A/E Contract):		Other:	\$0	Cost Estimator (3rd Party)	\$0	
Reimbursement of Consultant Paid Owner Expenses	\$500	Traffic Study	\$0	Certified Scheduler	\$0	
Topographic / Boundary Survey	\$0	Drainage Study	\$0	CD Bid Plan Sets	\$50	
Engineering Report (Civil, Structural, MPE)	\$0	Geotechnical Report	\$0	Construction Plan Sets	\$0	
Other - specify (Landscape, Interior Design etc.)	\$0	Subsurface Utility Engineering	\$0	Design Contingency (10%)	\$302	
C. Project Management / Construction Management / Construction Inspection / Pre-planning Costs / Extended CA					3.0000%	\$905
Estimated Professional Service Fees (A/E Contract)					\$4,773	
D. Reports / Studies / 3rd Party Consultants (Owner Items):		Constructability Review (MPS requirement for >\$10M) 1-2%	\$0	System Furniture Design:	\$0	
ACM Testing & Report	\$0	Commissioning	\$0	Other (In House Design)	\$0	
Registered Roofing Consultant (RRC)	\$0	Quality Assurance Agency	\$0	Scheduling/Estimating	\$0	
Estimated Professional Service Fees (Owner Items)					\$0	
Total Estimated Professional Service Fees					\$4,773	
II. Professional Service Fees: Estimated Out of Urban Area Cost Differential					0.0000%	\$0
ADJUSTED PROFESSIONAL SERVICE FEES AND CHARGES					\$4,773	
III. Project Construction Contingency (To be used for unforeseen conditions; Does not increase Scope of Work)					10.0000%	\$3,017
IV. Permits & Fees (Contractor)						
V. Real property Management Fee:						
A. \$00,001-\$50,000 Estimated project cost:		\$2,500 Fee	C. \$350,001-\$1,000,000 Estimated project cost:		\$30,000 Fee	
B. \$50,001-\$350,000 Estimated project cost:		\$15,000 Fee	D. \$1,000,001-\$3,000,000 Estimated project cost:		\$100,000 Fee	
			E. Over \$3,000,000 Estimated project cost:		\$150,000 Fee	
VI. Utility Application and Connection Fees: (Water, Sewer, Nevada Power meter and inspection)						
A. Water Application & Connection Fees		\$0	C. Power Application & Connection Fees		\$0	
B. Sewer Application & Connection Fees		\$0	D. Other:		\$0	
VII. Building Fixtures and Hardware						
A. Modular Work Station Unit		0	units	\$5,200	per unit	
B. Telephone System Equipment:		0	units	\$325	per unit	
C. Router with Switch and racks: (\$20,000 - up to 24 users; \$75,000 - up to 96 users); (48-port \$10,000; 24-port \$5,800)						
D. UPS System: (Small - \$ 15,000; Large - \$35,000)						
E. Server (if required - \$31,500)						
F. Registered Cabling Design / Engineering Service		0	Man Hours	\$80	per hour	
G. Wi-Fi System with conduits (One device per 2000 s.f.)		0	ea	\$5,000	per each	
H. General & Specialized Relocation: Packing and Moving (Regular time \$54.00/hr)		0	Man Hours	\$54	per hour	
I. Other (Specify)		0	unit (specify)	\$0	per(specify)	
SUBTOTAL BUILDING FIXTURES & HARDWARE					\$0	
2020 / 2021 SUBTOTAL OF ESTIMATED DESIGN & CONSTRUCTION COSTS MANAGED BY RPM					\$40,455	
VIII. FF & E (Free-Standing Furniture & Computers)						
A. Facility: (Free-Standing Furnishings and Computer Equipment)		0	s.f.	\$20	per s.f.	
B. Computer with Printer and Software		0	units	\$4,500	per unit	
C. Alarm System Service (First Year)		0	system	\$13,500	per system	
D. Other (specify)		0	unit	\$0	unit	
IX. Outreach: Departmental Project Notification and Publicity Requirements; Ground Breaking and Project Dedication						
2020 / 2021 SUBTOTAL OF ESTIMATED FREE-STANDING FURNITURE, COMPUTERS AND OUTREACH COSTS					\$0	
2020 / 2021 TOTAL ESTIMATED PROJECT COSTS FOR BUDGET PURPOSES					\$40,455	

f) Chiller 1 & 2 Replacement

PROJECT ELEMENT	SIZE	AREA or QUANTITY	PROJECTED UNIT COST	UNIT	COST ESTIMATE	
I. Projected Construction Costs: A. Building and/or Site Development						
1. General Requirements: Site supervision, temporary fencing, clean up, protect in place existing equipment etc.	5%	%	\$860,000	I.s.	\$43,000	
2. Chiller Demo & Replacement: Remove and replace (2) ~155 ton chillers and associated pumps with new similar models, provide temporary cooling and emergency hydronic piping. Includes demolition of (2) existing water cooled chillers, (2) chilled water and (2) condenser water pumps and associated appurtenances, installation of (2) new water cooled chillers, (4) pumps, and associated hydronic piping and appurtenances, installation of emergency hydronic piping and appurtenances, temporary cooling and power and associated power upgrades for new equipment.	1	I.s.	\$860,000	I.s.	\$860,000	
3. Off-site Construction: Off-site Construction with Signalization	0	lin. ft.	\$0	per lin. ft.	\$0	
4. Other: Contractors margins & adjustments (use 30-35% if not included in construction line items above)	35%	%	\$903,000	I.s.	\$316,050	
I. Projected Construction Costs: B. Specialty and/or Unique Projects Requirements:						
1. Pioneer/extend Utilities to project site boundaries:		C. Sewer Service Pioneering:		\$0		
A. Electric Service Pioneering:		D. Gas Service Pioneering:		\$0		
B. Water Service Pioneering:		E. Telephone/Cable/Fiber Service Pioneering:		\$0		
2. Computer / Telephone / Alarm System and/or CCTV Cabling ; Terminations / Wall plugs and/or mountboards: (Cabling to the site and interior to parcels and buildings (\$15,000 small facility; \$30,000 medium facility; \$60,000 large facility)						
3. Accessibility Path of Travel upgrades for alterations						
4. Other (Specify): JCI building automation system control integration.						
Estimated Project Construction Cost					\$1,249,050	
I. Projected Construction Costs: C. Estimated Out of Urban Area Construction Cost Differential					0.0000%	\$0
ADJUSTED PROJECT CONSTRUCTION COST ESTIMATE					\$1,249,050	
II. Professional Service Fees						
A. Professional Service Fees (A/E Contract): Planning / Design / Sub Consultants / Construction Documents / Specifications / Bid Preparation / Bidding Assistance / Basic Services of Contract Administration / Work Product					10.0000%	\$124,905
B. Reports / Studies / Owner Expense / Deliverables (A/E Contract):						
Reimbursement of Consultant Paid Owner Expenses					\$2,500	
Topographic / Boundary Survey					\$0	
Engineering Report (Civil, Structural, MPE)					\$8,500	
Other - specify (Landscape, Interior Design etc.)					\$0	
Other:					\$0	
Traffic Study					\$0	
Drainage Study					\$0	
Geotechnical Report					\$0	
Subsurface Utility Engineering					\$0	
Cost Estimator (3rd Party)					\$3,500	
Certified Scheduler					\$3,500	
CD Bid Plan Sets					\$50	
Construction Plan Sets					\$250	
Design Contingency (10%)					\$12,491	
C. Project Management / Construction Management / Construction Inspection / Pre-planning Costs / Extended CA					3.0000%	\$37,472
Estimated Professional Service Fees (A/E Contract)					\$193,167	
D. Reports / Studies / 3rd Party Consultants (Owner Items):						
ACM Testing & Report					\$5,000	
Registered Roofing Consultant (RRC)					\$0	
Constructability Review (NRS requirement for >\$10M) 1-2%					\$0	
System Furniture Design:					\$0	
Commissioning					\$30,000	
Quality Assurance Agency					\$10,000	
Other (In House Design)					\$0	
Scheduling/Estimating					\$2,500	
Estimated Professional Service Fees (Owner Items)					\$47,500	
Total Estimated Professional Service Fees					\$240,667	
II. Professional Service Fees: Estimated Out of Urban Area Cost Differential					0.0000%	\$0
ADJUSTED PROFESSIONAL SERVICE FEES AND CHARGES					\$240,667	
III. Project Construction Contingency (To be used for unforeseen conditions; Does not increase Scope of Work)					10.0000%	\$124,905
IV. Permits & Fees (Contractor)						
V. Real property Management Fee:						
A. \$00,001-\$50,000 Estimated project cost:					\$2,500 Fee	
B. \$50,001-\$350,000 Estimated project cost:					\$15,000 Fee	
C. \$350,001-\$1,000,000 Estimated project cost:					\$30,000 Fee	
D. \$1,000,001-\$3,000,000 Estimated project cost:					\$100,000 Fee	
E. Over \$3,000,000 Estimated project cost:					\$150,000 Fee	
VI. Utility Application and Connection Fees: (Water, Sewer, Nevada Power meter and inspection)						
A. Water Application & Connection Fees					\$0	
B. Sewer Application & Connection Fees					\$0	
C. Power Application & Connection Fees					\$0	
D. Other:					\$0	
VII. Building Fixtures and Hardware						
A. Modular Work Station Unit					0	units
B. Telephone System Equipment:					0	units
C. Router with Switch and racks: (\$20,000 - up to 24 users; \$75,000 - up to 96 users); (48-port \$10,000; 24-port \$5,800)					\$5,200	per unit
D. UPS System: (Small - \$ 15,000; Large - \$35,000)					\$325	per unit
E. Server (If required - \$31,500)						
F. Registered Cabling Design / Engineering Service					0	Man Hours
G. Wi-Fi System with conduits (One device per 2000 s.f.)					0	ea
H. General & Specialized Relocation: Packing and Moving (Regular time \$54.00/hr)					0	Man Hours
I. Other (Specify)					0	unit (specify)
SUBTOTAL BUILDING FIXTURES & HARDWARE					\$0	
2020 / 2021 SUBTOTAL OF ESTIMATED DESIGN & CONSTRUCTION COSTS MANAGED BY RPM					\$1,714,622	
VIII. FF & E (Free-Standing Furniture & Computers)						
A. Facility: (Free-Standing Furnishings and Computer Equipment)					0	s.f.
B. Computer with Printer and Software					0	units
C. Alarm System Service (First Year)					0	system
D. Other (specify)					0	unit
IX. Outreach: Departmental Project Notification and Publicity Requirements; Ground Breaking and Project Dedication						
2020 / 2021 SUBTOTAL OF ESTIMATED FREE-STANDING FURNITURE, COMPUTERS AND OUTREACH COSTS					\$0	
2020 / 2021 TOTAL ESTIMATED PROJECT COSTS FOR BUDGET PURPOSES					\$1,714,622	

g) Data Room A/C Addition

PROJECT ELEMENT	SIZE	AREA or QUANTITY	PROJECTED UNIT COST	UNIT	COST ESTIMATE
I. Projected Construction Costs: A. Building and/or Site Development					
1. Cooling Improvements: Furnish and install (2) new chilled water fan coil units at TR Rooms 1107 and 1167. Includes installation of (2) 1.5 Ton chilled water fan coil units [EC HDV-06 or equal] for rooms 1107 and 1167 with supply and return air ductwork, diffusers, thermostats, CHWS/R connections and piping, flex connections, test & balance, as-built and electrical modifications including conduit, feeders and new dedicated circuits at existing panels. The units shall be installed above the ceiling near each space (final location TBD) and duct directly to the existing supply diffuser locations. Connect to the nearby existing chilled water mains for both units. Furnish and install new thermostats located adjacent to doorway inside the space. Reference assessment report and recommendations prepared by DG Koch and dated 2/18/2021.	1	I.s.	\$41,655	ea	\$41,655
2. Drywall & Paint: Allowance for patch and repair to hard lid ceilings due to fan coil installation	1	I.s.	\$3,500	I.s.	\$3,500
3. Off-site Construction: Off-site Construction with Signalization	0	lin. ft.	\$0	per lin. ft.	\$0
4. Other: Contractors margins & adjustments (use 30-35% if not included in construction line items above)	33%	%	\$45,155	I.s.	\$14,901
I. Projected Construction Costs: B. Specialty and/or Unique Projects Requirements:					
1. Pioneer/extend Utilities to project site boundaries:	C. Sewer Service Pioneering:		\$0		\$0
A. Electric Service Pioneering:	\$0	D. Gas Service Pioneering:	\$0		
B. Water Service Pioneering:	\$0	E. Telephone/Cable/Fiber Service Pioneering:	\$0		
2. Computer / Telephone / Alarm System and/or CCTV Cabling ; Terminations / Wall plugs and/or mountboards: (Cabling to the site and interior to parcels and buildings (\$15,000 small facility; \$30,000 medium facility; \$60,000 large facility)	\$0				
3. Accessibility Path of Travel upgrades for alterations	\$0				
4. Other (Specify): Allowance to for modifications to building automation controls.	\$8,500				
Estimated Project Construction Cost					\$68,556
I. Projected Construction Costs: C. Estimated Out of Urban Area Construction Cost Differential					0.0000%
ADJUSTED PROJECT CONSTRUCTION COST ESTIMATE					\$68,556
II. Professional Service Fees					
A. Professional Service Fees (A/E Contract): Planning / Design / Sub Consultants / Construction Documents / Specifications / Bid Preparation / Bidding Assistance / Basic Services of Contract Administration / Work Product				15.0000%	\$10,283
B. Reports / Studies / Owner Expense / Deliverables (A/E Contract):					
Reimbursement of Consultant Paid Owner Expenses	\$275	Traffic Study	\$0	Cost Estimator (3rd Party)	\$2,500
Topographic / Boundary Survey	\$0	Drainage Study	\$0	Certified Scheduler	\$0
Engineering Report (Civil, Structural, MPE)	\$2,500	Geotechnical Report	\$0	CD Bid Plan Sets	\$50
Other - specify (Landscape, Interior Design etc.)	\$0	Subsurface Utility Engineering	\$0	Construction Plan Sets	\$150
				Design Contingency (10%)	\$1,028
C. Project Management / Construction Management / Construction Inspection / Pre-planning Costs / Extended CA				3.0000%	\$2,057
Estimated Professional Service Fees (A/E Contract)					\$18,843
D. Reports / Studies / 3rd Party Consultants (Owner Items):					
ACM Testing & Report	\$0	Commissioning	\$2,500	System Furniture Design:	\$0
Registered Roofing Consultant (RRC)	\$0	Quality Assurance Agency	\$0	Other (In House Design)	\$0
				Scheduling/Estimating	\$1,200
Estimated Professional Service Fees (Owner Items)					\$3,700
Total Estimated Professional Service Fees					\$22,543
II. Professional Service Fees: Estimated Out of Urban Area Cost Differential					0.0000%
ADJUSTED PROFESSIONAL SERVICE FEES AND CHARGES					\$22,543
III. Project Construction Contingency (To be used for unforeseen conditions; Does not increase Scope of Work)					10.0000%
ADJUSTED PROJECT CONSTRUCTION COST ESTIMATE					\$68,556
IV. Permits & Fees (Contractor)					
ADJUSTED PROJECT CONSTRUCTION COST ESTIMATE					\$450
V. Real property Management Fee:					
A. \$00,001-\$50,000 Estimated project cost:	\$2,500 Fee	C. \$350,001-\$1,000,000 Estimated project cost:	\$30,000 Fee		\$15,000
B. \$50,001-\$350,000 Estimated project cost:	\$15,000 Fee	D. \$1,000,001-\$3,000,000 Estimated project cost:	\$100,000 Fee		
		E. Over \$3,000,000 Estimated project cost:	\$150,000 Fee		
VI. Utility Application and Connection Fees: (Water, Sewer, Nevada Power meter and inspection)					
A. Water Application & Connection Fees	\$0	C. Power Application & Connection Fees	\$0		\$0
B. Sewer Application & Connection Fees	\$0	D. Other:	\$0		
VII. Building Fixtures and Hardware					
A. Modular Work Station Unit	0	units	\$5,200	per unit	\$0
B. Telephone System Equipment:	0	units	\$325	per unit	\$0
C. Router with Switch and racks: (\$20,000 - up to 24 users; \$75,000 - up to 96 users); (48-port \$10,000; 24-port \$5,800)	\$0				
D. UPS System: (Small - \$ 15,000; Large - \$35,000)	\$0				
E. Server (if required - \$31,500)	\$0				
F. Registered Cabling Design / Engineering Service	0	Man Hours	\$80	per hour	\$0
G. Wi-Fi System with conduits (One device per 2000 s.f.)	0	ea	\$5,000	per each	\$0
H. General & Specialized Relocation: Packing and Moving (Regular time \$54.00/hr)	0	Man Hours	\$54	per hour	\$0
I. Other (specify)	0	unit (specify)	\$0	per(specify)	\$0
SUBTOTAL BUILDING FIXTURES & HARDWARE					\$0
2020 / 2021 SUBTOTAL OF ESTIMATED DESIGN & CONSTRUCTION COSTS MANAGED BY RPM					\$113,405
VIII. FF & E (Free-Standing Furniture & Computers)					
A. Facility: (Free-Standing Furnishings and Computer Equipment)	0	s.f.	\$20	per s.f.	\$0
B. Computer with Printer and Software	0	units	\$4,500	per unit	\$0
C. Alarm System Service (First Year)	0	system	\$13,500	per system	\$0
D. Other (specify)	0	unit	\$0	unit	\$0
IX. Outreach: Departmental Project Notification and Publicity Requirements; Ground Breaking and Project Dedication					
2020 / 2021 SUBTOTAL OF ESTIMATED FREE-STANDING FURNITURE, COMPUTERS AND OUTREACH COSTS					\$0
2020 / 2021 TOTAL ESTIMATED PROJECT COSTS FOR BUDGET PURPOSES					\$113,405

h) Interior Security Camera System Upgrade

PROJECT ELEMENT	SIZE	AREA or QUANTITY	PROJECTED UNIT COST	UNIT	COST ESTIMATE
I. Projected Construction Costs: A. Building and/or Site Development					
1. Low Voltage & Conduit: Furnish and install new CAT6 cable at new cameras where needed. Provide and install new pathways for new cable. If CAT5E is in place it will remain. Demo old cameras per drawing and site walk. Cameras to be provided and installed by others (JCI). One week for two tech is included for investigation. Reference Sturgeon Electric COFA dated 11/20/2021.	1	Ls.	\$89,490	Ls.	\$89,490
2. VMS Cameras: Furnish and install (~53) new VMS IP based cameras and new BCD NVR per the "Development Services Camera Matrix Rev 1" dated 2/8/2021, related design floor plan and JCI COFA dated 2-5-2021.	1	Ls.	\$82,145	Ls.	\$82,145
3. Electrical: Allowance for associated electrical upgrades required for new UPOE switches at IDF rooms to power new VMS cameras.	1	Ls.	\$10,000	Ls.	\$10,000
4. Patch & Paint: Allowance for miscellaneous patch and paint work at old camera locations; including removal and reinstallation of tracked ceiling tile finish at lobby areas by 3rd party contractor.	1	Ls.	\$6,500	Ls.	\$6,500
5. Other: Contractors margins & adjustments (use 30-35% if not included in construction line items above)	0%	%	\$188,135	Ls.	\$0
I. Projected Construction Costs: B. Specialty and/or Unique Projects Requirements:					
1. Pioneer/extend Utilities to project site boundaries:		C. Sewer Service Pioneering:		\$0	\$0
A. Electric Service Pioneering:	\$0	D. Gas Service Pioneering:	\$0		
B. Water Service Pioneering:	\$0	E. Telephone/Cable/Fiber Service Pioneering:	\$0		
2. Computer / Telephone / Alarm System and/or CCTV Cabling ; Terminations / Wall plugs and/or mountboards: (Cabling to the site and interior to parcels and buildings (\$15,000 small facility; \$30,000 medium facility; \$60,000 large facility)				\$0	
3. Accessibility Path of Travel upgrades for alterations				\$0	
4. Other (Specify)				\$0	
Estimated Project Construction Cost					\$188,135
I. Projected Construction Costs: C. Estimated Out of Urban Area Construction Cost Differential					0.0000%
ADJUSTED PROJECT CONSTRUCTION COST ESTIMATE					\$188,135
II. Professional Service Fees					
A. Professional Service Fees (A/E Contract): Planning / Design / Sub Consultants / Construction Documents / Specifications / Bid Preparation / Bidding Assistance / Basic Services of Contract Administration / Work Product				6.0000%	\$11,288
B. Reports / Studies / Owner Expense / Deliverables (A/E Contract):		Other:	\$0	Cost Estimator (3rd Party)	\$0
Reimbursement of Consultant Paid Owner Expenses	\$150	Traffic Study	\$0	Certified Scheduler	\$0
Topographic / Boundary Survey	\$0	Drainage Study	\$0	CD Bid Plan Sets	\$50
Engineering Report (Civil, Structural, MPE)	\$0	Geotechnical Report	\$0	Construction Plan Sets	\$150
Other - specify (Landscape, Interior Design etc.)	\$0	Subsurface Utility Engineering	\$0	Design Contingency (10%)	\$1,129
C. Project Management / Construction Management / Construction Inspection / Pre-planning Costs / Extended CA				3.0000%	\$5,644
Estimated Professional Service Fees (A/E Contract)					\$18,411
D. Reports / Studies / 3rd Party Consultants (Owner Items):		Constructability Review (NRS requirement for >\$10M) 1-2%	\$0	System Furniture Design:	\$0
ACM Testing & Report	\$2,500	Commissioning	\$0	Other (In House Design)	\$0
Registered Roofing Consultant (RRC)	\$0	Quality Assurance Agency	\$0	Scheduling/Estimating	\$0
Estimated Professional Service Fees (Owner Items)					\$2,500
Total Estimated Professional Service Fees					\$20,911
II. Professional Service Fees: Estimated Out of Urban Area Cost Differential					0.0000%
ADJUSTED PROFESSIONAL SERVICE FEES AND CHARGES					\$20,911
III. Project Construction Contingency (To be used for unforeseen conditions; Does not increase Scope of Work)					10.0000%
ADJUSTED PROJECT CONSTRUCTION COST ESTIMATE					\$18,814
IV. Real property Management Fee:					
A. \$00,001-\$50,000 Estimated project cost:		\$2,500 Fee	C. \$350,001-\$1,000,000 Estimated project cost:		\$30,000 Fee
B. \$50,001-\$350,000 Estimated project cost:		\$15,000 Fee	D. \$1,000,001-\$3,000,000 Estimated project cost:		\$100,000 Fee
			E. Over \$3,000,000 Estimated project cost:		\$150,000 Fee
Estimated Real Property Management Fees					\$15,000
V. Utility Application and Connection Fees: (Water, Sewer, Nevada Power meter and inspection)					
A. Water Application & Connection Fees		\$0	C. Power Application & Connection Fees		\$0
B. Sewer Application & Connection Fees		\$0	D. Other:		\$0
VI. Building Fixtures and Hardware					
A. Modular Work Station Unit		0	units	\$5,200	per unit
B. Telephone System Equipment:		0	units	\$325	per unit
C. Router with Switch and racks: (3) new UPOE switches.					\$40,000
D. UPS System: (Small - \$ 15,000; Large - \$35,000)					\$0
E. Server (if required - \$31,500)					\$0
F. Registered Cabling Design / Engineering Service		0	Man Hours	\$80	per hour
G. Wi-Fi System with conduits (One device per 2000 s.f.)		0	ea	\$5,000	per each
H. General & Specialized Relocation: Packing and Moving (Regular time \$54.00/hr)		0	Man Hours	\$54	per hour
I. Other (Specify)		0	unit (specify)	\$0	per(specify)
SUBTOTAL BUILDING FIXTURES & HARDWARE					\$40,000
2020 / 2021 SUBTOTAL OF ESTIMATED DESIGN & CONSTRUCTION COSTS MANAGED BY RPM					\$282,859
VII. FF & E (Free-Standing Furniture & Computers)					
A. Facility: (Free-Standing Furnishings and Computer Equipment)		0	s.f.	\$20	per s.f.
B. Computer: Upgraded PC workstation for new IP camera resolution viewing.		1	units	\$5,500	per unit
C. Alarm System Service (First Year)		0	system	\$13,500	per system
D. Other (specify)		0	unit	\$0	unit
Estimated FF & E Costs					\$19,000
VIII. Outreach: Departmental Project Notification and Publicity Requirements; Ground Breaking and Project Dedication					
2020 / 2021 SUBTOTAL OF ESTIMATED FREE-STANDING FURNITURE, COMPUTERS AND OUTREACH COSTS					\$5,500
2020 / 2021 TOTAL ESTIMATED PROJECT COSTS FOR BUDGET PURPOSES					\$288,359

i) Parking Lot Assessment

PROJECT ELEMENT	SIZE	AREA or QUANTITY	PROJECTED UNIT COST	UNIT	COST ESTIMATE	
I. Projected Construction Costs: A. Building and/or Site Development						
1. Building Construction:	0	s.f.	\$385	per s.f.	\$0	
2. Land Construction: (Parking, Site Improvements, Landscaping)	0	acres	\$500,000	acres	\$0	
3. Off-site Construction: Off-site Construction with Signalization	0	lin. ft.	\$0	per lin. ft.	\$0	
4. Other: Contractors margins & adjustments (use 30-35% if not included in construction line items above)	0%	%	\$0	I.s.	\$0	
I. Projected Construction Costs: B. Specialty and/or Unique Projects Requirements:						
1. Pioneer/extend Utilities to project site boundaries:		C. Sewer Service Pioneering:		\$0	\$0	
A. Electric Service Pioneering:		\$0	D. Gas Service Pioneering:			
B. Water Service Pioneering:		\$0	E. Telephone/Cable/Fiber Service Pioneering:			
2. Computer / Telephone / Alarm System and/or CCTV Cabling ; Terminations / Wall plugs and/or mountboards: (Cabling to the site and interior to parcels and buildings (\$15,000 small facility; \$30,000 medium facility; \$60,000 large facility)						
3. Accessibility Path of Travel upgrades for alterations						
4. Other (Specify)						
Estimated Project Construction Cost					\$0	
I. Projected Construction Costs: C. Estimated Out of Urban Area Construction Cost Differential					0.0000%	
ADJUSTED PROJECT CONSTRUCTION COST ESTIMATE					\$0	
II. Professional Service Fees						
A. Professional Service Fees (A/E Contract): Planning / Design / Sub Consultants / Construction Documents / Specifications / Bid Preparation / Bidding Assistance / Basic Services of Contract Administration / Work Product [Site survey and assessment report with scope of work recommendations and geotechnical assessment including soil samples and report. Assumes 80 hours @\$175/hr for civil engineering services + geotechnical services at 5 borings at \$1,700 per core (included below).]						
					0.0000%	
					\$14,000	
B. Reports / Studies / Owner Expense / Deliverables (A/E Contract):						
Reimbursement of Consultant Paid Owner Expenses		\$250	Other: Traffic Study	\$0	Cost Estimator (3rd Party)	\$2,500
Topographic / Boundary Survey		\$0	Drainage Study	\$0	Certified Scheduler	\$0
Engineering Report (Civil, Structural, MPE)		\$0	Geotechnical Report (5 cores)	\$8,500	CD Bid Plan Sets	\$50
Other - specify (Landscape, Interior Design etc.)		\$0	Subsurface Utility Engineering	\$0	Construction Plan Sets	\$100
			Design Contingency (15%)			\$2,100
C. Project Management / Construction Management / Construction Inspection / Pre-planning Costs / Extended CA					0.0000%	
Estimated Professional Service Fees (A/E Contract)					\$27,500	
D. Reports / Studies / 3rd Party Consultants (Owner Items):						
ACM Testing & Report		\$0	Constructability Review (NRS requirement for >\$10M) 1-2%	\$0	System Furniture Design:	\$0
Registered Roofing Consultant (RRC)		\$0	Commissioning	\$0	Other (In House Design)	\$0
			Quality Assurance Agency	\$0	Scheduling/Estimating	\$0
Estimated Professional Service Fees (Owner Items)					\$0	
Total Estimated Professional Service Fees					\$27,500	
II. Professional Service Fees: Estimated Out of Urban Area Cost Differential					0.0000%	
ADJUSTED PROFESSIONAL SERVICE FEES AND CHARGES					\$27,500	
III. Project Construction Contingency (To be used for unforeseen conditions; Does not increase Scope of Work)					10.0000%	
ADJUSTED PROJECT CONSTRUCTION COST ESTIMATE					\$0	
IV. Permits & Fees (Contractor)						
V. Real property Management Fee:						
A. \$00,001-\$50,000 Estimated project cost:		\$2,500 Fee	C. \$350,001-\$1,000,000 Estimated project cost:		\$30,000 Fee	
B. \$50,001-\$350,000 Estimated project cost:		\$15,000 Fee	D. \$1,000,001-\$3,000,000 Estimated project cost:		\$100,000 Fee	
			E. Over \$3,000,000 Estimated project cost:		\$150,000 Fee	
VI. Utility Application and Connection Fees: (Water, Sewer, Nevada Power meter and inspection)						
A. Water Application & Connection Fees		\$0	C. Power Application & Connection Fees		\$0	
B. Sewer Application & Connection Fees		\$0	D. Other:		\$0	
VII. Building Fixtures and Hardware						
A. Modular Work Station Unit		0	units	\$5,200	per unit	
B. Telephone System Equipment:		0	units	\$325	per unit	
C. Router with Switch and racks: (\$20,000 - up to 24 users; \$75,000 - up to 96 users); (48-port \$10,000; 24-port \$5,800)						
D. UPS System: (Small - \$ 15,000; Large - \$35,000)						
E. Server (if required - \$31,500)						
F. Registered Cabling Design / Engineering Service						
G. Wi-Fi System with conduits (One device per 2000 s.f.)		0	Man Hours	\$80	per hour	
H. General & Specialized Relocation: Packing and Moving (Regular time \$54.00/hr)		0	ea	\$5,000	per each	
I. Other (specify)		0	unit (specify)	\$0	per(specify)	
SUBTOTAL BUILDING FIXTURES & HARDWARE					\$0	
2020 / 2021 SUBTOTAL OF ESTIMATED DESIGN & CONSTRUCTION COSTS MANAGED BY RPM					\$30,000	
VIII. FF & E (Free-Standing Furniture & Computers)						
A. Facility: (Free-Standing Furnishings and Computer Equipment)		0	s.f.	\$20	per s.f.	
B. Computer with Printer and Software		0	units	\$4,500	per unit	
C. Alarm System Service (First Year)		0	system	\$13,500	per system	
D. Other (specify)		0	unit	\$0	unit	
IX. Outreach: Departmental Project Notification and Publicity Requirements; Ground Breaking and Project Dedication						
2020 / 2021 SUBTOTAL OF ESTIMATED FREE-STANDING FURNITURE, COMPUTERS AND OUTREACH COSTS					\$0	
2020 / 2021 TOTAL ESTIMATED PROJECT COSTS FOR BUDGET PURPOSES					\$30,000	

CAPITAL IMPROVEMENTS REQUESTS

The following capital projects were included in the BCC approved Department FY21 Budget and are presented to the BEFAC, for discussion and possible actions.

Employee Parking Lot LED Lighting	\$ 307,235
Lighting Control Panel Replacement	\$ 712,356
Exterior Waterproofing & Caulking Replacement	\$ 403,811
Exterior Break Area Fan & Lighting Replacement	\$ 40,455
Chiller 1 & 2 Replacement	\$ 1,714,622
Data Room A/C Addition	\$ 113,405
Interior Security Camera System Upgrade	\$ 288,359
Parking Lot Pavement Assessment	\$ 30,000
Total	\$ 3,610,243

ECONOMIC OUTLOOK

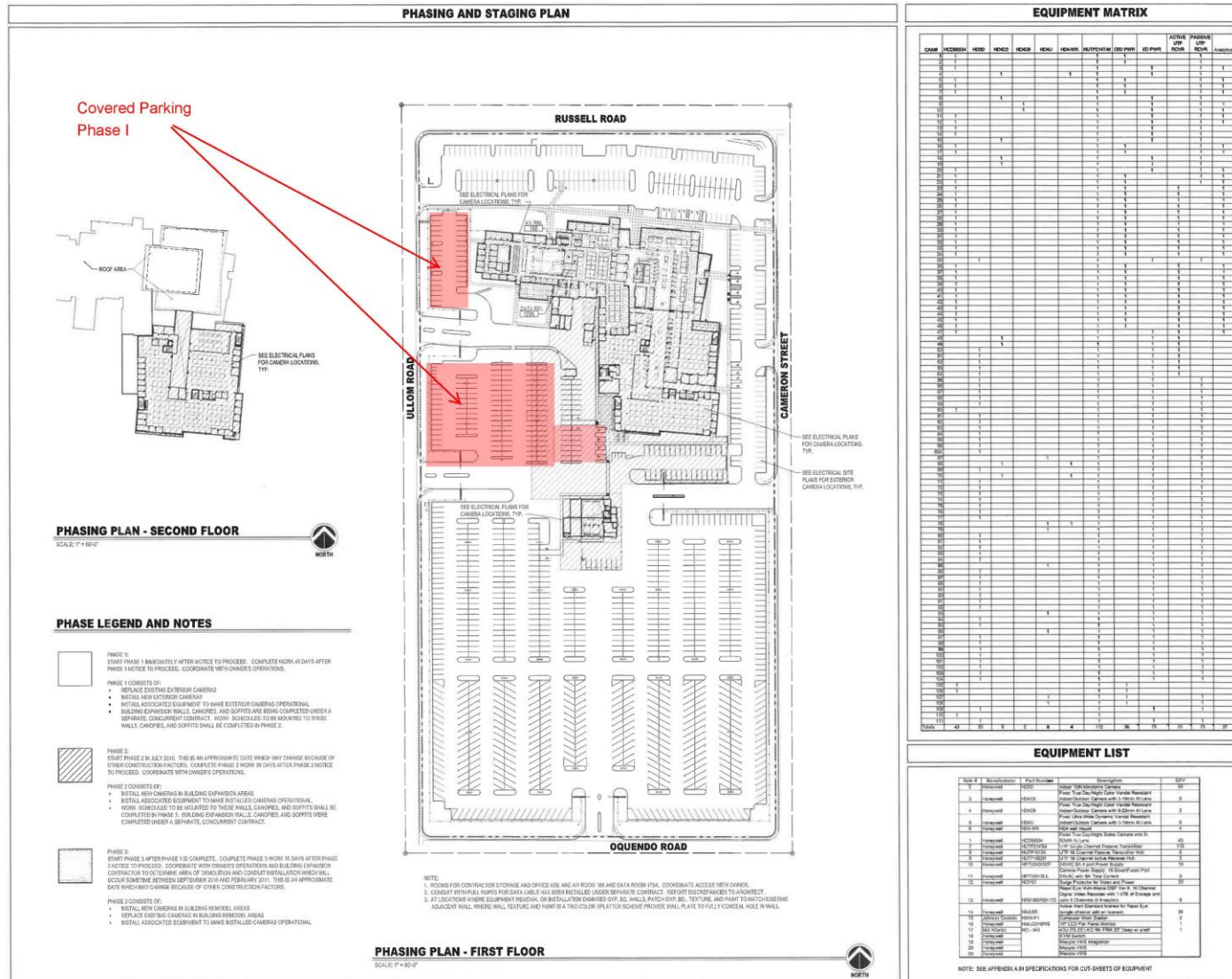
From BEFAC Members



a) Solar Panel Covered Parking – Phase 1

PROJECT ELEMENT		SIZE	AREA or QUANTITY	PROJECTED UNIT COST	UNIT	COST ESTIMATE
I. Projected Construction Costs: A. Building and/or Site Development						
1.)	PV Covered Parking (~30,200sf): Furnish and install mono-facial photovoltaic panels and structural steel canopy over employee parking space (similar to existing photovoltaic system). Includes inverters, electrical connections to MSB, NVE meter and associated electrical panels (trenching, UG conduit & conductors), concrete footings, and repair work to asphalt. Includes relocation of CCTV cameras and light poles in conflict with new carport structures. Reference OCMI rough order estimate dated 1/19/2021.	1	1s.	\$2,321,967	1s.	\$2,321,967
2.)	Land Construction: (Parking, Site Improvements, Landscaping):	0	acres	\$500,000	acres	\$0
3.)	Off-site Construction: Off-site Construction with Signalization	0	lin. ft.	\$0	per lin. ft.	\$0
4.)	Other: Contractors margins & adjustments (use 30-35% if not included in construction line items above)	0%	%	\$2,321,967	1s.	\$0
I. Projected Construction Costs: B. Specialty and/or Unique Projects Requirements:						
1.)	Pioneer/extend Utilities to project site boundaries:	C. Sewer Service Pioneering:		\$0		\$0
	A. Electric Service Pioneering:	\$0	D. Gas Service Pioneering:	\$0		\$0
	B. Water Service Pioneering:	\$0	E. Telephone/Cable/Fiber Service Pioneering:	\$0		\$0
2.)	Computer / Telephone / Alarm System and/or CCTV Cabling ; Terminations /Wall plugs and/or mountboards: (Cabling to the site and interior to parcels and buildings (\$15,000 small facility; \$30,000 medium facility; \$60,000 large facility)					\$0
3.)	Accessibility Path of Travel upgrades for alterations					\$0
4.)	Other (Specify)					\$0
Estimated Project Construction Cost						\$2,321,967
I. Projected Construction Costs: C. Estimated Out of Urban Area Construction Cost Differential						0.0000%
ADJUSTED PROJECT CONSTRUCTION COST ESTIMATE						\$2,321,967
II. Professional Service Fees						
A. Professional Service Fees (A/E Contract): Planning / Design / Sub Consultants / Construction Documents / Specifications / Bid Preparation / Bidding Assistance / Basic Services of Contract Administration / Work Product						10.0000%
B. Reports / Studies / Owner Expense / Deliverables (A/E Contract): Other:						\$0
Reimbursement of Consultant Paid Owner Expenses \$4,600 Traffic Study \$0 Certified Scheduler \$3,500						\$59,870
Topographic / Boundary Survey \$0 Drainage Study \$0 CD Bid Plan Sets \$50						
Engineering Report (Civil, Structural, MPE) \$8,500 Geotechnical Report \$6,000 Construction Plan Sets \$500						
Other - specify (Landscape, Interior Design etc.) \$0 Subsurface Utility Engineering \$10,000 Design Contingency (10%) \$23,220						
C. Project Management / Construction Management / Construction Inspection / Pre-planning Costs / Extended CA						3.0000%
Estimated Professional Service Fees (A/E Contract)						\$361,725
D. Reports / Studies / 3rd Party Consultants (Owner Items): Constructability Review (NPS requirement for >\$10M) 1-3% \$0 System Furniture Design: \$0						\$40,000
ACM Testing & Report \$0 Commissioning \$10,000 Other (In House Design) \$0						
Registered Roofing Consultant (RRC) \$0 Quality Assurance Agency \$25,000 Scheduling/Estimating \$5,000						
Estimated Professional Service Fees (Owner Items)						\$40,000
Total Estimated Professional Service Fees						\$401,725
II. Professional Service Fees: Estimated Out of Urban Area Cost Differential						0.0000%
ADJUSTED PROFESSIONAL SERVICE FEES AND CHARGES						\$401,725
III. Project Construction Contingency (To be used for unforeseen conditions; Does not increase Scope of Work)						10.0000%
IV. Permits & Fees (Contractor)						\$9,600
V. Real property Management Fee: C. \$350,001-\$1,000,000 Estimated project cost: \$30,000 Fee						\$100,000
A. \$00,001-\$50,000 Estimated project cost: \$2,500 Fee D. \$1,000,001-\$3,000,000 Estimated project cost: \$100,000 Fee						
B. \$50,001-\$350,000 Estimated project cost: \$15,000 Fee E. Over \$3,000,000 Estimated project cost: \$150,000 Fee						
VI. Utility Application and Connection Fees: (Water, Sewer, Nevada Power meter and inspection)						\$20,000
A. Water Application & Connection Fees \$0 C. Power Application & Connection Fees \$20,000						
B. Sewer Application & Connection Fees \$0 D. Other: \$0						
VII. Building Fixtures and Hardware						
A. Modular Work Station Unit 0 units \$5,200 per unit \$0						\$0
B. Telephone System Equipment: 0 units \$325 per unit \$0						\$0
C. Router with Switch and racks: (\$20,000 - up to 24 users; \$75,000 - up to 96 users); (48-port \$10,000, 24-port \$5,800)						\$0
D. UPS System: (Small - \$ 15,000; Large - \$35,000)						\$0
E. Server (if required - \$31,500)						\$0
F. Registered Cabling Design / Engineering Service 0 Man Hours \$80 per hour \$0						\$0
G. Wi-Fi System with conduits (One device per 2000 s.f.) 0 ea \$5,000 per each \$0						\$0
H. General & Specialized Relocation: Packing and Moving (Regular time \$54.00/hr) 0 Man Hours \$54 per hour \$0						\$0
I. Other (Specify) 0 unit (specify) \$0 per(specify) \$0						\$0
SUBTOTAL BUILDING FIXTURES & HARDWARE						\$0
2020 / 2021 SUBTOTAL OF ESTIMATED DESIGN & CONSTRUCTION COSTS MANAGED BY RPM						\$3,085,489
VIII. FF & E (Free-Standing Furniture & Computers)						
A. Facility: (Free-Standing Furnishings and Computer Equipment) 0 s.f. \$20 per s.f. \$0						\$0
B. Computer with Printer and Software 0 units \$4,500 per unit \$0						\$0
C. Alarm System Service (First Year) 0 system \$13,500 per system \$0						\$0
D. Other (specify) 0 unit \$0 unit \$0						\$0
IX. Outreach: Departmental Project Notification and Publicity Requirements; Ground Breaking and Project Dedication						\$0
2020 / 2021 SUBTOTAL OF ESTIMATED FREE-STANDING FURNITURE, COMPUTERS AND OUTREACH COSTS						\$0
2020 / 2021 TOTAL ESTIMATED PROJECT COSTS FOR BUDGET PURPOSES						\$3,085,489

Russell Campus Covered Parking Solar Array Analysis



02003

STAMP

REVISIONS

ARCHITECT

WELLES-PUGSLEY ARCHITECTS L.L.P.
200 EAST SPRING ST., SUITE 200, LAS VEGAS, NEVADA, 89101
PH: 702.735.1111 FAX: 702.735.1112 WWW.WELLES-PUGSLEY.COM

**CC DEVELOPMENT SERVICES EXPANSION
RUSSELL CAMPUS: SECURITY CAMERA
UPGRADE**
4701 W. RUSSELL ROAD, LAS VEGAS, NEVADA

PROJECT NAME

**EQUIPMENT MATRIX, EQUIPMENT LIST,
AND PHASING AND STAGING PLAN**

SHEET TITLE

PROJECT NUMBER: WPA-041-13

DRAWN BY: MTT

CHECKED BY: MTT

DATE: 1/15/09

SHEET NUMBER

G1.02

Russell Campus Covered Parking Solar Array Analysis

Array Size = 30,300 sf (2,814.96 m²) or approximately 267 kW array.

Average Month Energy Demand = 228,039.80 kWh

Per National Renewable Energy Laboratory – solar radiation in Las Vegas is 4-5 kWh/ m²/day.

Using 4.5 kWh/m²/day, array produces an average of 12,667.37 kWh/day or an average of 385,088 kWh per month (30.4 days/month).

Est. NVE rate Cost = \$0.08/kWh

Est. NVE Energy Buy back = \$0.024/kWh

Russell Campus Covered Parking Solar Array Analysis

*** > Buildings > Building & Fire Prev (Air Quality 2FL) > ⚡ 4701 W. Russell Rd-ELE01 [1006049-1831384-ELE01]

Bills Actual Data Calendarized Data Normalized Data Interval Data Savings Properties Flags

Readings Channels

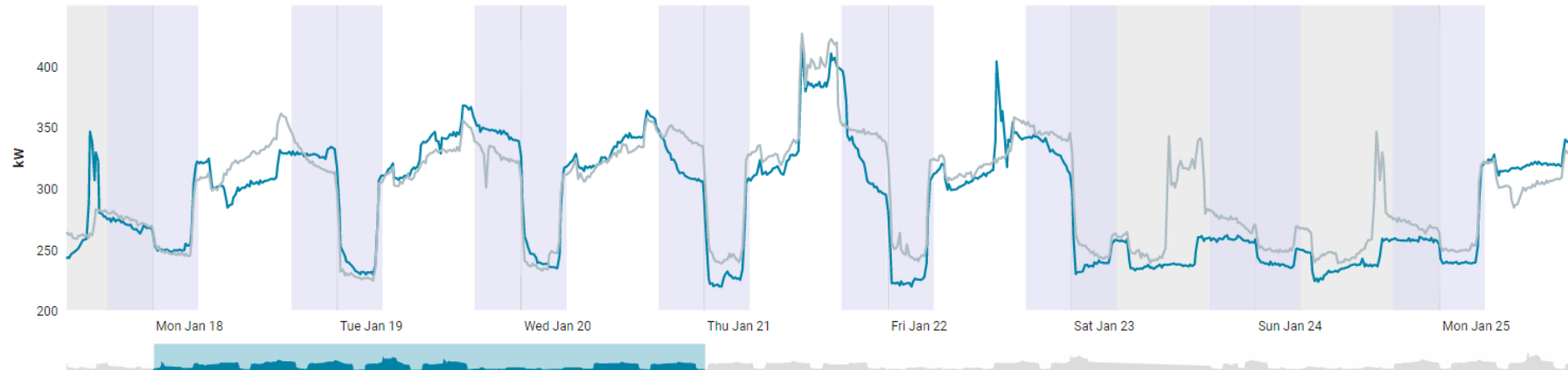
Current channel

15-minute Demand (Trip)

Most recent reading to view

2/16/2021

Interval Data: 01/16/2021-02/16/2021



Russell Campus Covered Parking Solar Array Analysis

Assumptions

- 1) 80% of energy consumption occurs during solar energy producing hours.

Calculations:

Energy cost avoidance: $238,039.80 \times 80\% \times \$0.08 = \$15,234.54/\text{month}$ or $\$182,814.57/\text{year}$.

Energy Revenue generations $(385,088 - (238,039.80 \times 80\%)) \times 0.024 = \$4,671.75/\text{month}$ or $\$56,061/\text{year}$.

Cost of installation: RPM Estimate $\$3,085,489$

Straight line Payback = $\$3,085,489 / (\$182,814.57 + \$56,061) = 12.9$ years

Carbon Footprint Reduction

From EPA, 1 lb CO₂/1 kWh

$190,431.20 \text{ kWh/yr} \times 1 \text{ lb CO}_2/\text{kWh} = 190,431.20 \text{ lbs}$ (863.78 tonnes) of CO₂ reduction per year.