

IX. PUBLIC WORKS – DEVELOPMENT SERVICES

A. PROFILE

The San Jose Public Works Department is made up of nine major divisions, including Administration, Airport Construction, Architectural Engineering, Design and Construction, Development Services, Engineering Services, Parks and Recreation Facilities, Real Property Services, and the Civic Center Team. This study will primarily focus on the activities of the Development Services Division. There are approximately 480 staff in the entire Department who are located in several offices throughout the city, as shown in Table 48.

Table 48
Public Works Department Offices

Division	Location	Staff	Reports To:
Administrative	City Hall - 801 N First St	10.0	City Manager
Airport Construction	1732 North First Street	26.0	Capital Projects Support Group
Architectural Engineering	675 North First Street	61.5	Facilities Group
Civic Center Team	4 North First Street	11.0	Major Program Group
Design & Construction (streets, bridges, sewers)	City Hall - 801 N First St	121.5	Major Program Group
Development Services	City Hall - 801 N First St	67.0	Capital Projects Support Group
Engineering Services	1661-A Senter Road	88.5	Capital Projects Support Group
Parks & Recreational Facilities	2 North First Street	56.0	Facilities Group
Real Property Services	84 West Santa Clara	15.0	Capital Projects Support Group

The management of the above Divisions is directed through four Group Deputy Directors who report to the Director of Public Works in the Administration Division. The four major groups include Business Services and Development, Facilities, Major Programs, and Capital Projects and Support.

The processing and/or review of private development projects is primarily handled by the Development Services Division, which will be the primary focus of our analysis. However, the Public Works' Architectural Engineering Division and Design and Construction Division, as well as the Department of Transportation (DOT), also play limited roles.

The Development Services Division has a budget of \$6,158,972 and a staff of 67.36 positions. Under the END CSA, the Division is responsible for the Core Service: Regulate/Facilitate Private Development. This Core Service has three programs, consisting of:

- ✍ Development Plan Review and Inspection
- ✍ Assessment Engineering
- ✍ Utility Services Reviews

Our analysis will focus on the Development Plan Review and Inspection aspects.

The Development Services Division is responsible for the following:

- ✍ Review of planning permits resulting in conditions for streets and utilities.
- ✍ Review of building permits for conformance to prior approvals and for approval of improvement plans.
- ✍ Approval of final maps and improvement plans for subdivisions.
- ✍ Review of grading plans.
- ✍ Issuance of miscellaneous permits for encroachments and construction in public rights of ways.

Small permits are received and can be issued at the permit counter. Project Teams are rotated each day and take permit applications back into their team area for processing. Few permits are issued over the counter.

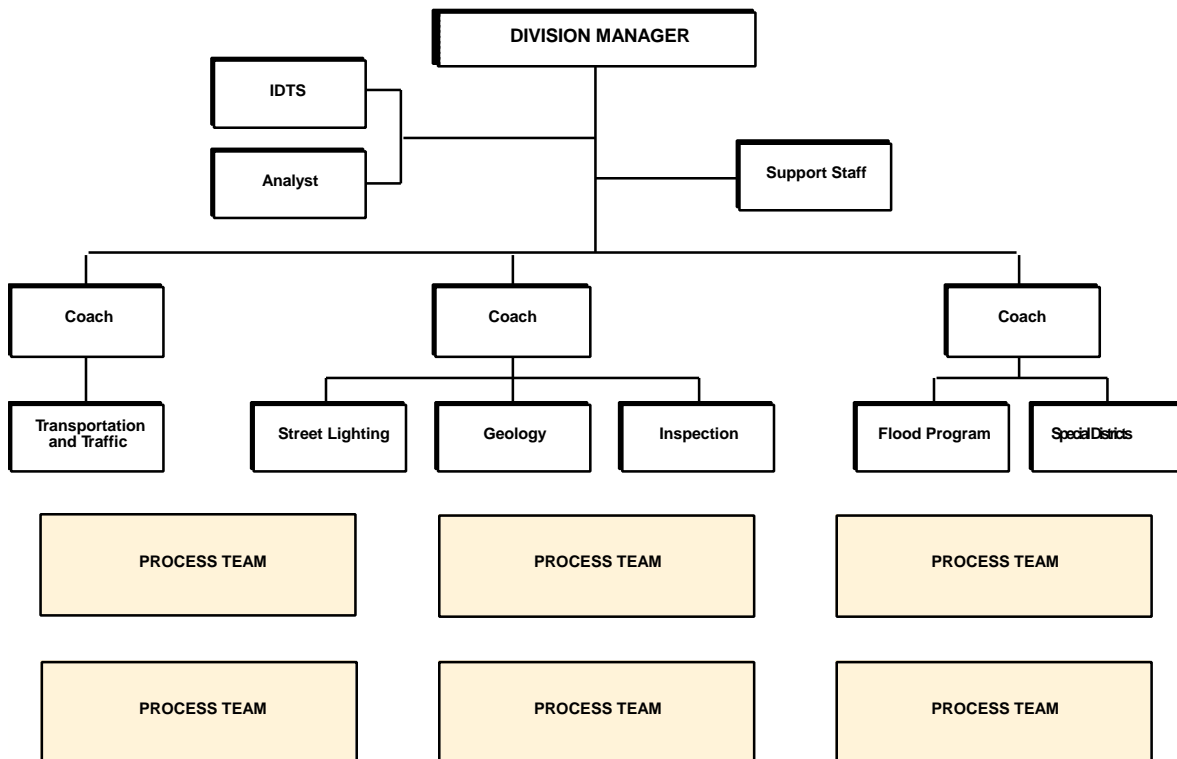
Each Project Team handles grading, except that there is a staff geologist who handles grading plan check in areas identified as a geological hazard area. The Offsite Inspection group of this Division handles grading inspection up to the certification and approval of the building pads. The Building Division Inspectors are responsible for the final lot drainage.

There is a constant need for interaction and communication between the Public Works Development Services Division (DSD), the City Planning Department, the Department of Transportation (DOT), and the Building Department. The DSD also needs to regularly connect with the Architectural Division and the Construction and Design Division within the Public Works Department.

Current Organization

The current organizational arrangement for delivery of these services is through six teams that are designed to cover all parts of areas of responsibility. Each team consists of one Civil Engineer, one Associate Engineer, and several Engineering Technicians. The organization of Development Services is shown in Figure 15 below.

**Figure 15
Development Services Organization**



There are three Senior Engineers who are advisors and “Coaches” to the teams.

Permit Activity

The Development Services permit activity is shown in Table 49.

Table 49
Development Services Permit Activity

Based on Date Approved	98-99	99-00	00-01	01-02
Grading Permits	120	155	156	88
Private Utility/Joint Trench	27	23	45	35
Lateral	29	33	38	27
Majors	34	46	41	40
Minors	83	97	62	74
Revocables	47	51	81	103
Tract Map/Improvement Plan	29	41	23	21
Subtotal	369	446	446	388
Based on Date Application Received				
Planning Permits (Development Review)	532	560	573	252
Parcel Maps	28	26	19	23
Subtotal	560	586	592	275
Total	929	1032	1038	663
Percentage		11.1%	0.6%	-36.1%

B. DEVELOPMENT SERVICES FOCUS GROUP

Eight engineers met for 90 minutes on June 19 at a City Hall conference room. The facilitator for the group was Zucker Systems' President, Paul Zucker. No City staff members were present. Participants were guaranteed full confidentiality. Issues discussed and paraphrased comments are described below.

Overview

The biggest issues for this group are consistency, time and accountability of employees.

Design Manuals

Design Manual Volume One primarily focuses on process. Volume Two is being worked on and will focus on standards. There is a concern that Volume Two will be too external and treated as rigid rules rather than guidelines.

Suggestion: Design Manual Volume Two should be kept brief and treated as guidelines, not rigid rules.

Department of Transportation and Public Works

Suggestion: The industry feels that the Department of Transportation and Public Works should be in the same department.

Inspection

Inspectors sometimes inappropriately take things in their own hands, even making requirements that change an approved plan.

Monthly Meeting

The monthly meetings with the industry have worked well, but they can also be improved. It used to be more staff learning from the industry, a productive “bitch session.” Now it’s more of staff talking to them. The meetings have become too formal and they have gotten too big.

Suggestion: Revise the monthly meetings to be more of what they once were and focus on ideas for improvement.

Parking

All complain about the lack of parking at City Hall and getting parking tickets. There is a concern that parking may not be much better at the new City Hall. This is considered an insult to the industry.

Plan Check and Consistency

The engineers want a good plan check and consistent plan checks. These keep the developer out of trouble during construction. Currently, the plan check may depend on which team you get. There is a lack of consistency and stability between teams. Staff no longer seems competent to provide a good technical plan check; today it’s more like a drafting plan check. Additionally, the team leaders are more like managers and also may not have the technical expertise for good plan checks. The plan checkers should review based on whether the project meets the guidelines, not on how they would design it.

Suggestion: More internal technical training is needed.

Suggestion: Team leaders need to do a better job of editing project managers’ comments.

Suggestion: Ask the private engineers to come in and conduct training seminars for staff. Walk through what a permit engineer does.

Suggestion: Restrict plan checks to a review of the guidelines.

Plan Review – Coordination

Development Services does not appear to have any hammers on other Public Works functions or other departments who are part of the City Plan Check. There is no one truly managing the project. There is no tracking system to tell where the project is.

Suggestion: Clear timelines need to be set for all reviewers.

Suggestion: Team managers should manage the projects and get other reviewers to meet timelines.

Suggestion: Have a tracking system showing where the project is, preferably on the Internet.

Plan Check – First Check

It used to be that you got a good first-check plan check. Now, new items may be added late in the plan check cycles on the 2nd or 3rd check. First-check was supposed to be done in 30 days, now it is two to four months. Four weeks is considered OK. Some would like three weeks first-check; two weeks second-check; and one week third-check. The big issue is to set and meet timelines so engineers can advise their clients.

Suggestion: Set and enforce clear plan check timelines.

Plan Check – Traffic

Traffic plan check is a particular problem. Project managers simply do not have needed traffic skills. Also, there are no clear timelines on the scope of work for traffic studies. It used to be two weeks; now it's months. There appear to be no staff consequences of not meeting the timelines. San Jose is one of the worst cities to work with in regard to traffic review.

Suggestion: Have one or two staff specialists who know traffic and can advise other staff on actually conducting the traffic checks.

Suggestion: Set and meet timelines for scoping traffic studies, two weeks being desirable.

Teams

There are mixed feelings concerning the teams. There is an advantage of having plan check coordinated by one person. The problem is that there is a lack of expertise and specialties within the teams. There also appears to be a lack of accountability. What is needed is to train and keep a core of good people. Maybe there is a need for a Junior Team to handle simple projects and a Senior Team for the more complex projects.

Traffic Signal Design

Traffic Signal Design is a major problem. It involves two divisions in Public Works and one in the Department of Transportation.

Suggestion: Combine traffic signal design in one place.

C. FINDINGS

This review found some exemplary features as well as a variety of opportunities for improvement in the Development Services Division. Positives included:

- ✍ The management and key staff of DSD are highly motivated, professional, and experienced.
- ✍ The organization structure of the DSD has developed an excellent teamwork ethic among the staff of the Division.
- ✍ The management and staff of the DSD have recognized many of the issues and problems related to time delays in the development review process.
- ✍ Management and staff of DSD have maintained a positive, or “can-do” attitude with respect to resolving plan check and project delay issues.

Opportunities for improvement are discussed along with recommendations in the following sections of the report.

D. ORGANIZATION

The Development Services Division has a unique team concept that until recently has met the qualitative and quantitative challenges associated with the high volume and fast pace of development in San Jose. The fundamental organization consists of six separate teams supported by an Inspection team, a Special Districts team and five small teams for Flood Program, Street Lighting, Transportation and Traffic, Geology and IDTS. These development review teams in turn report to three coaches who direct and control the flow of work to the teams. There is no obvious line of authority or reporting relationship between the individual teams and the supervisors--the coaches. The Division has been able to offset this “disconnect” primarily through good

teamwork and communication between the coaches, the Division Manager and the individual review teams.

The teamwork model used by the DSD depends on frequent interaction between the coaches and key members of each individual team. Work assignments are managed with a minimum of one weekly team joint meeting and additional meetings as the workload dictates. The coaches, team leaders and others who may have an interest in participation in a given project attend the team meetings. Work is assigned, issues and conflicts resolved and direction is given to each team. Another major factor that contributed to the successful operation of this organization in the past has been a relatively high level of professional experience among a significant number of the individual team members.

During our early review of Development Services we were somewhat critical of the team/coach structure due to its apparent lack of direct supervision or lines of authority. However, after further review, we believe it is workable with a few minor modifications. We were particularly swayed by the fact that virtually all staff feels the approach works and is desirable. These and other organizational issues are discussed below.

Coach's Role

While on the surface it appears that all teams report to all three coaches, this is an oversimplification. The coaches tend to specialize, as shown in Table 50.

Based on this analysis, we suggest that Development Services continue with the team/coach approach. Should Development Services have problems in making the improvements suggested in this report, then the role of the coaches should be re-examined.

**Table 50
Coaches Special Assignments**

Assignment	Coach 1	Coach 2	Coach 3
Office Operations	Quality Control	Records Retention	Customer Service/Counter Operations
	Training	Development Manual	IDTS/Technology
			Investing in Results
			MIS Liaison
			GIS Liaison
			Capital Projects Support Group
			Capital Projects Support Group
			Facilities Group Capital Projects Support Group
Planning	Planning Support		Sewer Fees/STP
	Reimbursement		Underground
Implementation	Landscape Architectural Liason	Geology	Building Division Liaison
		Improvement Plan Standards (Public)	Real Estate Liaison Vacations
		Private Street Standards	Parks Liaison
		Inspection	Contract Administrative (Districts)
		Mapping	
		Pavement Design/Lab Liaison	
		Revocable Encroachment	
		Sidewalk/Sewer Lateral	
Budget	DAP, MSI	Fees and Charges*	In-Lieu Fees
Flood & Hydraulics	Grading/Non-Point Source/Erosion Control		Flood
			Storm and Sanitary
Transportation	Transportation ATI		
	Transportation Level of Service Maintenance		
	Transportation Policy/Transportation Liaison		
	Traffic Calming		
Special Districts			CFD/Assessment Districts
Electrical		Street Light Design	
		Traffic Signals Liaison	
		Joint Trench	
Special Projects	Coyote	Edenvale	Communication Hill
	ESP		Downtown Coordinator
	Evergreen Industrial		
	Coleman Corridor Strong Neighborhood Initiative		

*Coaches will rotate through the Budget assignments periodically.

254. Recommendation: The Coaches and Team Leaders should meet to discuss how to best address the customer concerns re content of engineering reviews.

We heard considerable staff complaints related to delegation and empowerment. Staff's comments are summarized as follows:

- ✍ This organization is top heavy, with too little authority designated to staff members who actually do the work. What happens is that important documents, letters, routine communications, memos, etc. are often delayed for a signature from someone who has no knowledge of what they are signing.
- ✍ Public Works personnel policies do not recognize the considerable contribution from individuals who are not engineers.
- ✍ Everyday activities do not require such high level approvals.
- ✍ Too much emphasis is put on who is the team leader. Their name is on everything, to the exclusion of the person doing the work.
- ✍ Looking or waiting for a Project Engineer to sign certain memos (memos to release security deposits, to review a map, to sign improvement plans/maps) or approve certain permits (like lateral and revocable permits) shouldn't be necessary.
- ✍ This Division does not utilize its resources efficiently. Often times we have technicians doing an engineer's job and engineers doing technician's or a secretary's job.
- ✍ Including signature authority of Sanitary Lateral, 3-Minor and Revocable Encroachment permits into my job responsibilities would greatly assist our Division in processing permits in a timely manner.
- ✍ If a team manager has a meeting with the client regarding his project, include the staff person at the meeting so that he or she knows what is happening regarding this project. This helps the employee get ownership of the project.

We believe that these are all legitimate concerns that need to be addressed. Giving employees as much empowerment as they are capable of handling is a key to motivation and efficiency in a contemporary organization. It's also a key to an effective quality control program

255. Recommendation: The Development Services Division should review the employee concerns outlined in the report and consider ways to increase employee empowerment.

With the exception of the Eden Vale Assessment District team, the teams do not have any geographic specialization. We wonder whether there wouldn't be some advantage to having the teams geographically organized to match the City Council District processing teams found in Planning. This could solidify communications and might also present some advantages at the elected official or community level.

256. Recommendation: Development Services should examine the pros and cons of organizing at least some of their functions on a geographic basis.

Principal Civil Engineer

The Development Services Principal Civil Engineer (Division Manager) reports to a Group Deputy Director who in turn reports to the Public Works Director. However, the Public Works Department has the same problem that we often see in many public works departments. Development review is such a small part of the Department's functions that it receives a lower priority than the larger capital improvement program functions. Some communities have resolved this by moving the development engineering functions into an integrated permitting department. We have discussed this in Chapter IV, but are not recommending it at this time. Another way to get more attention in Public Works would be for the Development Services Division Manager to report directly to the Public Works Director. Irrespective of what solution is adopted, there is a need for Public Works to give more attention and focus to the permitting and development activities.

257. Recommendation: The Public Works Director and Deputy Director need to provide more focus to the permitting and development activities. One option would be for the DSD manager to report directly to the Public Works Director.

E. WORK FLOW AND MANAGEMENT

Preliminary Project Review

The Public Works Development Services Division (DSD) becomes involved with the review of most development projects during the early stages of the City's discretionary process in the Planning Department. The review is there to assure that the City's engineering design and other adopted standards are met. During these early stages of review, the input and participation by public works DSD provides many of the fundamental design and construction requirements that must be satisfied by the proposed development in the discretionary review process. The input from DSD at this stage is a very important part of the overall development review process. With most new developments, traffic issues often become the most critical.

In a typical case when an application is received for a zone change and tract map approval, the Planning Department will provide a copy of the project application along with pertinent information and a request for input from the Public Works DSD. The application is assigned to one of the teams along with discussion and direction as to the form of the Public Works' response. There is a standardized letter that the team leader uses as a guide in the preparation of this response. The letter is effectively a checklist for the Engineers and Planners to assure that they cover all salient issues with the project. The appropriate coach reviews this response draft before it is sent back to the Planning Department. All of this work proceeds under the agenda

deadlines issued by Planning. Planning's cut-off date for most planning projects is Friday. Applications are distributed to Public Works a day or two later. Draft comments are due from Public Works the second Thursday after the application was submitted, which is when a Project Review meeting is held for all of the reviewing functions. Public Works' comments at this point in the process need to be sufficiently detailed so that Planning can complete their 30-Day letter. According to the Planning staff, the timing problems with Public Works do not relate to this first comment review cycle. Rather, the problem is in getting the final Public Works memo, which needs to be included in Planning's staff report. The Public Works memos evidently often come late in the process and can either delay the hearing or the release of the staff report.

258. Recommendation: Planning and Public Works should meet to talk about project review deadlines and set specific deadlines for all final Public Works comments.

Public Works staff may attend the Planning Commission hearing to respond to any particular issue or details.

Improvement Plan Project Review Time

Upon approval of the project development, the primary interaction changes to the developer and the Public Works DSD. Preparation of the improvement plan or final tract map is the responsibility of the developer, who submits these documents to DSD for review and approval. The same team that assisted during the zoning and tract map approval process is assigned the continuing responsibility for checking the final map and improvement plans. The prior work by the team at the earlier planning stages facilitates a familiarity and more rapid review of those final documents.

Depending on the complexity of the project, the times vary for this stage of the review. However, the DSD does commit to a turnaround time with the developer based on a standard list. All of the checking and review (with the exception of geometric designs for traffic signal plans, which are sent to DOT) is done in the Public Works Department.

A significant concern rests with the amount of time necessary to complete the review of plans and documents by the DSD. Most of the issues discussed in this section of the report have become issues because it is perceived that too much time is used to complete the necessary review and approvals.

There are numerous factors that impact the amount of time that is necessary to complete the review of any given project. They include, but are not limited to, the following list:

- ✍ Project complexity and size

- ✍ Quality and completeness of submittal
- ✍ Experience and coordination among the various reviewing staff

It is clearly the desire of the DSD to complete its review as rapidly as possible and yet assure that all engineering and City requirements are correctly reflected in the planning and development documents. There are several recommendations throughout this chapter that are focused on the objective of reducing the time necessary to complete the review. Managing the overall process, particularly where the project review crosses departmental lines, needs to be facilitated by the END CSA. DSD's goals for review times are shown in Table 51.

**Table 51
DSD Review Times**

Service Provided	Response Time
Planning Application Review	10 Days
Traffic Impact Analysis Workslope Review	15 Days
Traffic Impact Analysis Report Review	15 Days
Map Review Only (No Public or Private Street Improvement Plans)	10 Days
Map and Private Street Plan Review (No Public Improvements)	15 Days
Map, Public Improvement and Private Street Plan Review	15 Days
3-Dash Major Improvement Plan Review	20 Days
3-Dash Minor Improvement Plan Review	10 Days
Private Utility Plan (Joint Trench) Review	5 Days
Revocable Permit Review	5 Days
Sewer Lateral Permit	2 Days
Flood Zone Information	2 Days
GeoHazard Clearance (Simple)	2 Days
GeoHazard Clearance Assessment or Investigation Review	10 Days
Inspection Request	24 Hours

* Note: All times are in working days (Mon-Fri, excluding City Holidays and Christmas Furlough).

While the review times shown in Table 51 are generally reasonable, DSD's published performance standards indicate that these goals were met only 55% of the time in FY 01/02. Actual review times for the first quarter of 2002 are shown in Table 52.

This data indicates that the FY 02/03 75% goal is not being met. This would explain why the customers are concerned with DSD's review times. While some of the recommendations in this report could help to shorten DSD review times, we estimate that with current workloads and staffing levels it will not be possible to meet the performance targets. The City should be aware that this aspect of the customers' complaints is not likely to be solved under the current adopted system. Timely review of projects depends greatly upon a complete and accurate submittal. A thorough, complete check may not be possible if the submittal is below standard.

Table 52
DSD Review Times, 01/01/02 to 3/31/02

Plan/Permit Type	Goal (Days)	Number of Reviews	Number Meeting Goal	Percent Meeting Goal	Average Review Time	Minimum Review Time	Maximum Review Time
Grading	10	13	4	31%	41	5	256
Major Improvement	15	9	2	22%	35	9	103
Minor Improvement	10	18	11	61%	12	0	36
Tract Map/Plan	20	2	0	0%	34	26	41
Traffic Report	15	7	2	29%	28	9	57
Planning Application	14	49	18	37%	11	0	118
Subtotal		98	37				
Other							
Parcel Maps	15	3	2				
Private Street	20	2	1				
Revocable	5	1	0				
Private Utility	5	3	0				
Sewer Lateral	2	1	1				
Subtotal		10	4	40%			
Total Development		108	41				

- 259. Recommendation:** DSD staff to provide a list of mandatory submittal items for the acceptance of plans and documents for checking. DSD may reject incomplete submittals without a complete check and initiate a new agreement for plan check time.
- 260. Recommendation:** Developer and DSD should agree to a total review time needed for each project. A standard list or special schedule should be developed for complex projects.
- 261. Recommendation:** DSD Manager and coaches shall assure that project assignments are directed to staff with the appropriate level of expertise and experience to complete the work.
- 262. Recommendation:** To the extent possible, DSD plan review and permit timelines should be identical to or shorter than review times used in Planning and Building.

Given the poor performance by DSD, the City needs to look at DSD staffing. In theory, the budget and staffing has been developed to meet the 75% goal. However there are currently four vacant frozen positions; a Senior Tech, Associate Tech, Clerical and Associate Inspector. In addition, two positions are vacant due to employees out on medical leave. This means that 10% of DSD's budgeted positions

are not available for work. This does not result in a reasonable approach to customer service.

263. Recommendation: Vacant positions in DSD should be filled and positions vacant for medical leave should be filled by temporary help or consultants.

Complete Response on First Check

A number of complaints have been noted that the first plan check received by developers has not been complete. This has been evidenced by additions of new comments and corrections on subsequent plan checks. It is imperative that the City provides a comprehensive first check. This obligation holds as long as the submittal is complete. A forgoing recommendation provides that a submittal could be rejected if incomplete. A complete first check is one of the key CSA performance measures discussed in Chapter IV.

264. Recommendation: DSD should develop its system for how to monitor first check completeness.

Landscape Plan Check

The plan check required for landscape plans has been identified as an impediment to timely processing. The plan check responsibility has been assigned to the Public Works Department's Architectural Engineering Division, since the technical expertise is available in that Division. The Development Services Division and the Architectural Engineering Division are working together to resolve the priority and timely review of submitted plans. In the recent past, there has been an overall delay in the plan approval of any development where landscape improvements are involved because the landscape plan check was neither completed nor coordinated with the main check in DSD. It was also found that developers were not receiving a complete review on the first landscape check.

265. Recommendation: The staff person in the PW Architectural Engineering Division responsible for plan check of landscape plans shall attend the weekly team meetings conducted by the DSD coaches and staff.

266. Recommendation: Require the Architectural Engineering Division to adhere to the agreed plan check turnaround time for each project. DSD shall maintain a priority checklist for each project to assure compliance. If this method fails, then reassign the landscape plan check function for private development in the Architectural Engineering Division to DSD.

There are often occasions when it would make sense to delay the installation of landscape into a more comprehensive landscape or street beautification project. An in-lieu fee system could be used in these instances.

267. Recommendation: The Architectural Engineering Division and DSD should develop a system for payment of in-lieu fees to permit opportunities to incorporate overall developer landscape projects into more comprehensive city landscapes and street beautification projects.

Traffic Signal Plan Check

The basic problem is similar to the landscape plan check described above except that it is an inter-departmental rather than an intra-departmental issue. The City Department of Transportation (DOT) is a well run and highly experienced and professional group. It is also clear that the DOT has the expertise to deal with traffic signal and signal systems design. This Department is also responsible for the long-term maintenance of the signals and other street improvements.

Traffic review of planned new development is often the most contentious development issue. It is imperative that the City coordinates and unifies its approach and response to all matters pertaining to this most critical matter.

A brief overview of the flow of the traffic signal review process is in order. The initial part of the review most often includes a traffic report prepared by the developer during the discretionary review and approval of the project. After that discretionary approval is secured, the final improvement plans are submitted. If a traffic signal is required, a geometric design review and approval by DOT is processed. The completed geometric design and traffic signal design parameters are then forwarded to the Public Works Department Design and Construction Division. The Design and Construction Division then reviews the final plans for traffic signals to assure conformance with the City's electrical and other standards. Each project requires at least three "hand off" transactions, which has resulted in a significant time delay. There is considerable dissatisfaction among the development community because of the delays involved.

The DSD and DOT have attempted to better coordinate their efforts, however there is still a considerable backlog of project reviews that reside in the offices of DOT. Most of the backlog is in the geometric design review of new traffic signals that are required by the development. As of this date, serious problems of coordination exist with the review of traffic geometric and traffic signal design. Both departments have responsibility for these delays. DOT is not processing the geometric design review in a timely manner, and the Design and Construction Division of Public Works has not given priority to the completion of final engineering plan check for signals. Quite often, the DSD has been forced to provide a qualified approval of a project absent the

necessary detailed approvals of traffic geometric and signal design. This is unacceptable.

A staff person from DOT does attend the weekly project assignment meetings in DSD, but this has not resulted in any expedited review of project plans. Until recently, DOT was under the impression that they had no access to the fees collected for development review. DOT is now aware that the collected development fees fund their work. DOT staff are aware of this issue and have been developing some approaches, but the final solution must be based on a full agreement between Public Works and DOT and not unilaterally by either Department.

268. Recommendation: DOT staff responsible for traffic signal plan geometric review and approval shall attend the weekly DSD team meeting to agree on project review priorities and timely delivery of the submitted plans. A priority checklist and schedule for each pending project will be addressed.

269. Recommendation: DOT shall be obliged to maintain the committed review schedule that is set for each project.

270. Recommendation: DOT shall commit to an expedited review and completed processing of the current backlog of geometric design review.

271. Recommendation: The DPW Construction Services Division shall agree to schedule and produce timely reviews of all pending and future traffic signal plans.

272. Recommendation: If the above four recommendations do not produce measurable improvements during the first quarter of the 2002/03 fiscal year, then reassign DOT and DPW Construction Services Division staff to the DSD.

F. ADMINISTRATIVE ISSUES

Communications

Both DSD staff and clients (customers) have commented on the difficulty of contacting with each other due to limitations placed on the phone and e-mail systems. Each team leader (Associate Engineer) could be more effective in their workday if

they had direct lines and sufficient e-mail capacity to communicate with those involved in the development process.

273. Recommendation: Expand phone systems to fully include all DSD team members.

274. Recommendation: Expand DSD email mailbox space to accommodate large Cad file or photos.

275. Recommendation: Provide cordless phones and/or headsets at the front counter for staff to use while simultaneously researching documents, files and other data.

276. Recommendation: Expedite the inclusion of the Internet Web site to provide for the electronic issuance of minor encroachment permits and other permits that can be issued electronically.

277. Recommendation: Provide inspection staff with appropriate field computers and training to properly document inspections for all DSD fieldwork. The system must be compatible with AMANDA and have the capability of downloading information via a docking and on-line connection.

Staff complain that it is necessary to dial numerous numbers to access their voice mail and that sometimes messages arrive two days late. Given process time and communication concerns, these types of problems need to be corrected immediately.

278. Recommendation: The DSD's voice mail access and timing should be improved.

We are also told that staff can only transfer people to extensions inside the DSD division.

279. Recommendation: DSD phones should be programmed to allow easy transfer of calls to any City extension.

Counter Hours

The Development Services counter is open from 8:00 a.m. to 5:00 p.m. The Building and Planning counters do not open until 9:00, allowing time for staff training. In the new City Hall Permit Center, we recommend that all counters be open at the same time. As a start toward this objective, it may be useful to open DSD's counter at 9:00 a.m. As with other departments and divisions, the additional hour each morning could be used for training.

280. Recommendation: Open DSD's counter at 9:00 a.m.

Developer Meetings

A number of years ago, DSD began having monthly meetings with the development community, particularly private engineers. These meetings received high marks from the engineers and were highly successful. Recently, however, the industry has indicated that the meetings can be improved. They feel the meetings have gotten too large and have become staff talking to them rather than a mutual exchange of ideas for improvement.

281. Recommendation: DSD should use one of the monthly industry meetings to discuss the appropriate attendance and a format for the meetings.

Files and Records

The files and records system in public works has been both complimented and criticized by staff. Records management is essential to an effective function in DSD. Staff estimates that there is a period of approximately three to six months between the time that a project is finalized and closed-out to the time it is available for viewing by the general public. This is not good public service.

282. Recommendation: DSD should review its project close-out system with the goal of reducing the time between close-out and when the records are available to the public.

As with the Planning Division, we received numerous staff complains about the inability to find files and about lost files. Evidently, staff does not always use file out-cards when taking the files, or return them when they are through using them.

283. Recommendation: DSD management should develop a program to enforce a file out-card system.

Permit Counter

The Development Services permit counter is staffed by the Project Teams. Team members rotate to the counter a half day at a time with one team in the morning and one in the afternoon. This type of a system often provides too little consistency at the counter and interrupts the work of the Project Teams. Although we didn't receive customer complaints concerning the current system, we believe DSD should consider providing more consistency to the counter functions. This could be achieved by having two employees assigned to the counter on half-day shifts with Project Teams assigned for backup and overflow work as needed. This should be planned for the current operation, as well as for the new City Hall. We are particularly concerned about the counter function at the new City Hall because staff will not be located in close proximity to the counter. Additionally, it is likely that some counter functions will gradually be merged in order to integrate intake. In this respect, the Permit Center coordinator will find it much easier to get consistency and work with a smaller number of staff.

284. Recommendation: DSD should transition to dedicated counter staff with appropriate back up staff.

Quality Control

Currently, the quality control effort is managed by one of the coaches in Development Services. The effort consists of an overview check of plans and other documents completed by staff. It is our impression that this effort is directed to only the more complex projects, or where the coach and team have decided that quality control review is necessary. The result is that there is not an effective quality control program that assures that every project has had a quality check.

A better approach would be to assign two teams to each coach for quality control responsibility. Each coach would work directly with individual staff engineers and technicians who perform plan review to assure consistency and quality. They would monitor their work, advise them, and assure that they are all using City policies. The coaches would confer together as a committee to develop this work program and the procedures to be used. The coaches would also work with each staff engineer who performs plan review and train them to do their own quality review. Likewise, the Project Engineers should train the people who work for them to do quality control.

Quality control and training is the best way to assure uniformity and meet public concern. It is recommended that the following quality control program be implemented in Development Services.

1. The training program recommended in this report should be implemented.

2. The Project Engineers should be part of a quality control committee that works directly with the Senior Engineer quality control coach to develop guidelines and a work program.
3. The coaches for quality control shall work at least four hours each month directly with each Project Engineer or Engineering Technician to observe work on their current projects, review processes, policies, and procedures, and advise them. They should keep notes on specific direction given. They should review a sample of completed projects before they are released for distribution to applicants. A similar process should be used by the Project Engineers and the people they supervise.
4. Written policies and procedures should be developed by the quality control team working with the coach.
5. Develop a ride-along procedure for the Inspection Supervisor to periodically accompany each Inspector to observe and evaluate their inspections, to ensure consistency between Inspectors, and to advise them.
6. Periodically, have the Inspectors, Engineers, and Engineering Technicians meet to review the quality of plans being approved and to discuss issues they could consider in order to avoid having Inspectors make changes in the field.

285. Recommendation: Develop and implement an expanded quality control program to cover all engineering review performed by the Development Services Division to achieve consistency and accuracy.

Relations With Redevelopment

Redevelopment has had a number of concerns about the services they receive from Public Works. Some of these concerns centered around Public Works not wanting to be involved in projects until there was a project number. The new Director of Public Works has changed the policy and this is no longer an issue. In order to resolve other issues, Public Works and RdA have had a series of partnering sessions to clarify roles. These are shown in Table 53. This is an excellent approach that Development Services could use to resolve their issues with other Public Works Divisions and the Department of Transportation.

286. Recommendation: Development Services should use a partnering approach similar to the one used with the Redevelopment Agency to resolve any inter- or intra-departmental issues.

**Table 53
Public Works/RdA Relations**

PW Development Services Activities	RdA Assisting a Developer	RdA as a Developer (Public Projects)	
		Consultant Managed	PW/AE Managed
RDA involves PW @ the Prelim Stage	X	X	X
Traffic report/Operational analysis, sewer capacity, offsite improvements, impact fees, service, park fees			
<i>Funding</i>	PSM 210	PSM 210	PSM 247
Entitlement	X	PSM	X
zoning, PD/H			
<i>Funding</i>	PW fee schedule	PW fee schedule	PSM 247
Grading	X	X	
<i>Funding</i>	PW fees/Downtown PSM??	PW fees/Downtown PSM??	PW fees/Downtown PSM??
Revocable encroachment	X	X	
tie backs	X	X	
sidewalk closure	X	X	
street closure	X	X	
<i>Funding</i>	PW fees/Downtown PSM??	PW fees/Downtown PSM??	PW fees/Downtown PSM??
3- dash/tract improvement plan			
service fees	X	X	Get charge # from AE
impact fees	X		
bonds	X	RDA will ensure	RDA will ensure
completion deposit	X	RDA will ensure	RDA will ensure
insurance	X	RDA will ensure	RDA will ensure
review of offsite improvement plan	X	X	DS will review with AE
sign off from RDA	X	X	X
Issuance of PW clearance	X	X	
<i>Funding</i>	PW fees/Downtown PSM??	PW fees/Downtown PSM??	PW fees/Downtown PSM??
Construction			
Inspection	X	X	AE inspector will inspect
<i>Funding</i>	PW fees	PW fees/Downtown PSM??	PW fees/Downtown PSM??
Notice of Acceptance	X	X	
RDA ensures that PW accepts public impts. prior to releasing the bonds		X	X
<i>Funding</i>			PW fees/Downtown PSM??

Team Experience – Training

The experience of the managers and supervisors of the Development Services Division (DSD) is excellent. It is acknowledged, however, that the overall collective experience of the engineering and technical staff is below the ideal level. As stated earlier, the team organization concept functioned very well when the professional experience of most team members was high. The overall decline in the ability of the DSD is not due to any single factor, but a combination of factors, as follows:

- ✍ Individual engineers and technicians that have gained experience can be lured away to other higher paying and more responsible assignments in both public and private organizations. In the desire to hold down costs, the City has only

been able to recruit at the lower pay scale. Once individual staff acquires about three to four years of experience, they move on. The slower economy has recently reduced this impact somewhat.

- ✍ Training of in-house staff is below the minimum necessary to bring employees to higher levels of proficiency. It is argued that individual fees do not support training time and, therefore, the DSD is forced to minimize the time involved. Moreover, the technical support staff should be expanded to serve all the review teams to help close this experience gap. It appears the present level of training is only about one hour per person, per week.

One of the highest priorities observed and heard from the customers is the concern for inconsistencies found between individual Development Services staff in how they approach interpretations and decisions. The most important tool to achieve consistency is through training together. There is an advantage to sending staff to seminars provided by experts outside the City. The problem is that when you send two or more people to the same seminar, each of them generally interprets and applies what they learn in different ways, resulting in occurrences of inconsistency.

An in-house training program should be established and should provide staff with classroom-type training on a weekly basis to achieve mutual understanding. This training should be scheduled on the same day and time each week, so that staff expects it routinely. The program can include sharing information received from outside seminars.

The in-house training program should be planned ahead for each quarter. Teaching assignments should be given to every staff engineer. Classes should cover, but not be limited to, at least the following:

- ✍ Review and explanation of each City Standard Drawing and application.
- ✍ State and Federal regulations, including the Storm Water Runoff Act.
- ✍ Review and explanation of City ordinances, interpretations, and policies enforced by Development Services.
- ✍ Review of approaches expected when reviewing engineering assumptions and calculations for submittals.
- ✍ Review of turnaround time for plan reviews, permits and expectations.
- ✍ Review of Citywide processing flow for development permits and development services and the expectations of Development Services.
- ✍ Customer Service training.
- ✍ Understanding of other functions in the development process, such as Planning, Building, Redevelopment, PW Architectural Engineering, Health and Code Enforcement. (Invite them to participate).

- ✍ Taking input from City maintenance services (DOT) that have to maintain construction approved by engineering.
- ✍ Grading and soils science.
- ✍ Construction materials.
- ✍ Sharing opinions and suggestions from staff, particularly between plan check and inspection staff.

The City Offsite Inspectors should also conduct weekly training on many of the above subjects and inspection procedures. When preparing quarterly agendas, it should be determined which subject areas scheduled for engineers should also be attended by the Offsite Inspectors.

The training should be coordinated by the engineer assigned to training coordination. We recommended such a training coordinator elsewhere in this report.

287. Recommendation: Increase the time devoted exclusively to staff training from the present level to a minimum of three hours per person per week. The costs can be absorbed in the normal overhead in the fee program.

288. Recommendation: Immediately initiate a training program that increases the skills of all new (less than two year) employees to a higher level. An academy for training is an essential element that needs to be implemented for all new incoming employees.

289. Recommendation: Establish a weekly training program to be attended by every professional and technical staff member. Schedule training meetings at the same time each week.

290. Recommendation: Training presentations should be assigned to each staff engineer. The assigned training coordinator shall be held responsible for ongoing facilitation of the training program and training assignments.

291. Recommendation: A quarterly schedule should be planned and distributed to staff. Presenters should prepare and submit outlines for their presentation.

The level of expertise within Development Services is a major concern of the customers. The Planning section of this report has laid out a ladder of experience approach to training of planners. The same approach could be used for engineers.

292. Recommendation: The Development Services Division should use the “Ladder of Experience” approach to training engineers.

Work Space Needs

The workspace available for the DSD is woefully inadequate. The only area in the Division that has some amount of "breathing room" is the public counter. The lack of plan layout space available to the review teams, the overwhelming congestion of plans and files, and the small workspaces available for the engineers and technical staff all contribute to the delay in plan processing. These working conditions also contribute to higher staff turnover and the lowering of experience levels of the development review teams. The Public Works front counter has a great deal of extra space in the waiting area. The work area behind the counter is congested and inefficiently utilized. The DSD assigns each team to work at the front counter to handle inquiries and miscellaneous permits on a rotation basis. This is a good way to share the load and give all staff an important interaction with their customers. There are times when the counter duty is slow and the involved staff could be working on other projects when not responding to the public at the counter.

293. Recommendation: Redesign the DSD front counter to move it out farther into the unused waiting area. This will be a relatively low-cost improvement that will immediately benefit productivity.

294. Recommendation: Provide a minimum of four large layout plan review tables (48" x 72") to be used by the teams in the DSD. The office space necessary to accommodate these tables can be located in the space created by the relocated counter.

G. GRADING

Grading Plan Check and Inspections is operated out of the Public Works Development Services Division. Their plan check is part of an organization that assigns all projects into seven different working groups. Each group is self-contained to handle public and private improvements, including civil engineering issues on dedicated public property and grading on private property. There is one staff geo-technical engineer who reviews all grading plans for projects located in identified geo-hazard zones in the City. Grading inspection is performed by a separate unit of Offsite Inspectors who conduct inspections on public rights-of-way and grading on private property. When rough grading is completed, responsibility for fine grading and drainage is delegated to the Building and Safety Inspectors. Private property

grading and fine grade is an item that appears to be getting little attention with regard to paving, stripping and drainage.

The foundation system of buildings is predicated upon the soil bearing values on the property. The integrity of the foundation system also depends on the mineral content of the soil. Buildings are dependent on the bearing resistance of the soil or rock on which they are located. If they subside or fail under the weight of a building, the potential for damage or failure exists. Adequate drainage to protect the integrity of the building foundation and surrounding areas is also an important factor that needs to be coordinated. Therefore, the coordination between grading and building to assure all elements of design and construction are covered is essential. Capability of the infrastructure to handle water runoff and compliance with the federal storm water act are equally important.

Information received reveals the following:

- ✍ There is minimal, if any, training for Plan Check Engineers and Inspectors on grading.
- ✍ There is little, if any, coordination and linkage between Public Works Development Services and Building and Safety.
- ✍ Parking lots and hard pavement flat work on private property does not appear to get the attention it needs from either Public Works or Building and Safety.
- ✍ Land use conditions appear to be loosely enforced as they relate to property improvements.

All of the above need attention.

While there would be benefit in forming a separate grading function, it would create extra costs in a time where cost containment is a priority in San Jose. Therefore, we are recommending that grading remain in Public Works with improvements in training, coordination, and attention to other needs that may exist.

It is not clear whether the grading plan check and building plan check are both reading and applying the same soils report on individual projects. It would be beneficial if the Grading Plans Checker in Public Works were to complete a cover sheet detailing the approved soil bearing values and mineral content of the soil so that both work from identical criteria for benefit of the buildings.

295. Recommendation: Establish a regularly scheduled training program for all Engineers and Inspectors who are assigned to grading regulation responsibility.

- 296.** *Recommendation:* Public Works and the Building Official should coordinate grading, review responsibilities and critique major projects after completion.
- 297.** *Recommendation:* Public Works and the Building Official should meet and confer to determine who will monitor parking lots and flat work construction with regards to construction and drainage, and develop written guidelines.
- 298.** *Recommendation:* The grading plan check should establish a cover sheet to be attached to plans which detail the approved soil bearing value, soil log, and soil mineral content, along with identification of critical areas of concern for building foundation and area drainage attention.
- 299.** *Recommendation:* The Development Services Division should work with Building and Safety inspection staff to review federal storm water containment procedures and design criteria where they should be sensitive and give attention.
- 300.** *Recommendation:* Continue the current organizational placement for grading plan review and inspections due to budget constraints. When the economy improves and development increases, consider changing to a separate grading section.

H. INSPECTION

Inspection Team

The DSD Inspection Team operates from a satellite office and has only infrequent contact and communication with the Inspectors from other divisions and departments. The inspection and fieldwork being conducted by the City appears to be a piece-meal operation. Better coordination and combination of inspection disciplines and arrangements could possibly save time and money in the development review process.

Part of the problem for all City departments, including Public Works, is that their operations are located in several offices in several different locations. There appears to be no significant effort to coordinate or set up communication among these different groups. As a part of the new City Hall, consideration should be given to locating inspection, laboratory and field operations to a single corporate yard and

facility. Moreover, work should be initiated now to set up a computer-based inspection-reporting system that allows inspection reports to be downloaded on a daily basis to the AMANDA system.

There is presently a significant disconnect between the DSD engineering staff and the DSD field inspection team. It appears that practical field considerations are being overlooked or are not being recognized by the engineering staff in the plan check process. Consequently, it has been noted that inspectors have required changes to work in the field that has not had an engineering review or is not shown on the plans. It is extremely important to recognize that there is often a great reservoir of practical engineering and construction knowledge within an inspection group, and that DSD should more effectively utilize this resource.

Inspection staffing and workload do not appear to be in balance. The DSD has not provided an inspection assignment or workload demand outline as of the date of this report. Inspection staff should be commenting on the plans being presented for review by the DSD. This is not currently being done. The reason stated for this is that there is not enough time to cover the field inspections for the plans that have been approved and construction initiated. It is possible that the inspection group is understaffed, which can result in incomplete inspections or late inspections that require changes.

From the organization chart, it appears that there are currently only five inspectors working directly on private development projects. There is one vacant position and four more positions are responsible for assessment district or non-fee funded projects. There are four more positions assigned to the VTA. The conclusion is that the City has only ten full-time inspectors for a program that is near \$40 million worth of new infrastructure improvements each year. This service level is inadequate and it is certainly less than full inspection.

301. Recommendation: Workload assignments for each inspector should be reviewed by the Manager and the Principal Construction Inspector. Assignments should include adequate time for both training and pending project plan review. A determination should be made to adjust staffing to meeting the workload demands.

302. Recommendation: To improve the span of control for the Principal Construction Inspector, select two Senior Inspectors to serve as lead or assistant administration roles to facilitate supervision, control of work schedule and coordination of different locations of DSD inspection staff.

303. Recommendation: Integrate inspection staff more completely into the DSD review process starting with the upgraded training program previously described.

304. *Recommendation:* Require engineering staff to work in the field with inspection to work first-hand with the practical implementation of the improvement plans during part of the training regimen.