

Design-Build Surgical Center Program Management

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DBIA and COAA present

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PREPARING
TODAY FOR
HEALTHCARE
FACILITIES
OF THE
FUTURE

Mission

Provide *Construction Managers and Owner Stakeholders* with Real Time Information Relating to Project:

- ◆ Schedules
- ◆ Costs
- ◆ Quality Control
 - ❖ *Design*
 - ❖ *Construction*
 - ❖ *Post-Construction*
- ❖ *Multiple Stakeholders – no experience in DB*
 - ❖ *Medical staff, interior designers, administrators*

Complications

Design Build Construction of Surgical Centers has a number of complications:

- ◆ **Multiple Owner/Stakeholders**
 - ◆ **Surgeons, medical specialists**
 - ◆ **Medical System Administrators**
- ◆ **Owner Contractually Hands Off Design**
 - ◆ **Performance based requirements**
 - ◆ **Owner stakeholders lose daily control**
- ◆ **Risk in Communications**
 - ◆ **Partnering makes most sense**
 - ◆ **Requires innovative communications**

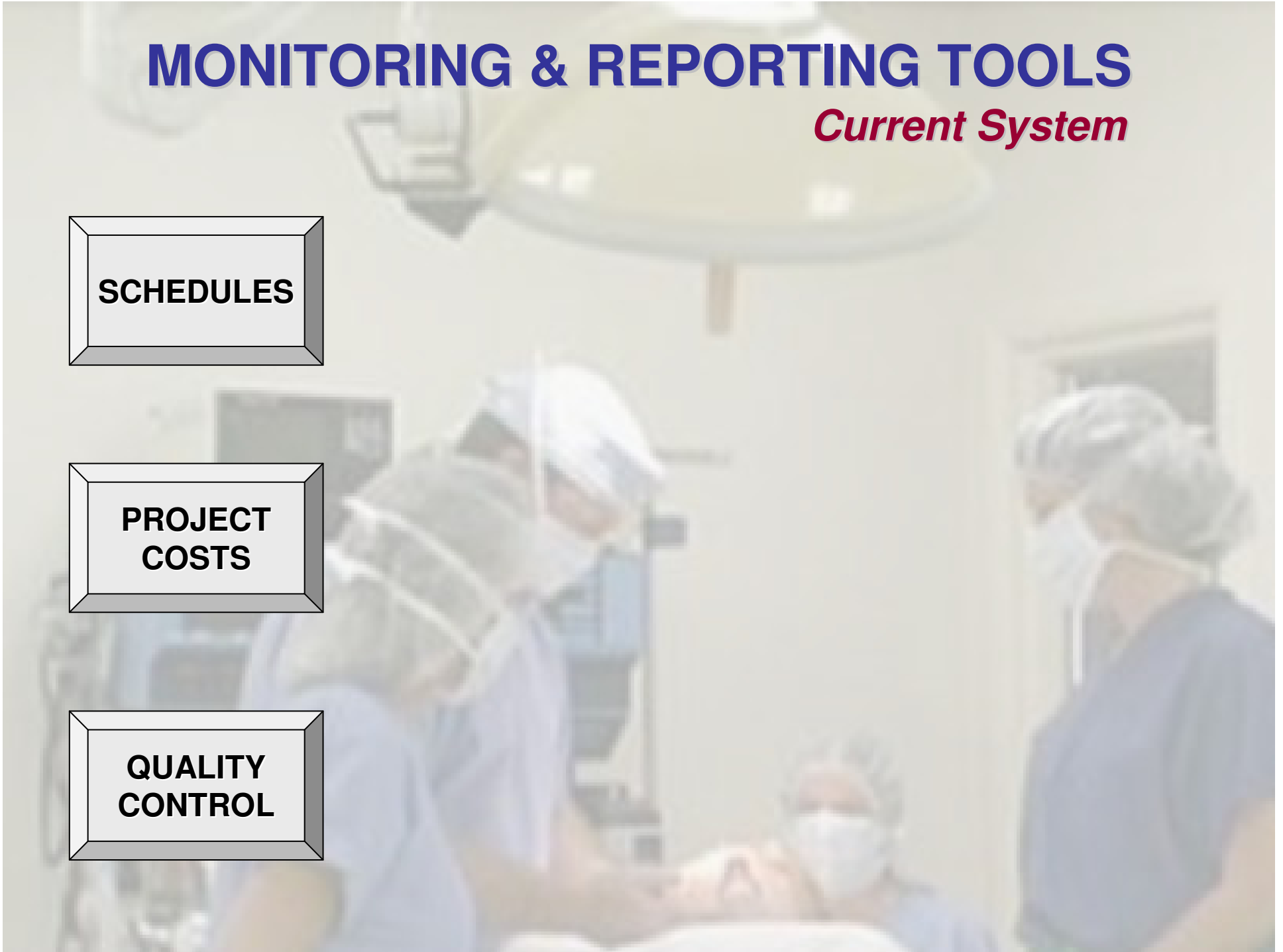
MONITORING & REPORTING TOOLS

Current System

SCHEDULES

**PROJECT
COSTS**

**QUALITY
CONTROL**



MONITORING & REPORTING TOOLS

Current System

SCHEDULE

- ◆ *Preconstruction Milestone Schedule*
- ◆ *Contractor Baseline & Monthly Updates*
- ◆ *Overview Reporting*
- ◆ *Specifications Requiring Cost & Resource Loading*
- ◆ *Dashboard - Engineering, Construction, Maintenance*

PROJECT COSTS

QUALITY CONTROL

MONITORING & REPORTING TOOLS

Current System

SCHEDULE

PROJECT
COSTS

- ◆ *Preconstruction Estimate/Budget*
- ◆ *Contractor Budget at Design Stages*
- ◆ *Monthly Estimates & Cost Reports*
- ◆ *Variance Reports (Over-run and Under-run)*
- ◆ *Work Orders, Change Orders, Directives*
- ◆ *Dashboard - Engineering, Construction, Maintenance*

QUALITY
CONTROL

MONITORING & REPORTING TOOLS

Current System

SCHEDULE

**PROJECT
COSTS**

**QUALITY
CONTROL**

- ◆ *Design – Facility, Utilities, Permitting, Geotechnical*
- ◆ *Construction – Inspector Daily Reports, RFI's, Meeting Minutes, Deficiency Reports, Safety Reports*
- ◆ *Compliance with Performance Goals*

IMPROVING THE CURRENT PROCESS

- Provide an integrated enterprise system
 - Summary management at program level
 - Collate existing information
 - Provide new communication and analysis tools – allow all team members access
 - Eliminate repetitive data entry

Primavera Enterprise Provides the Tools For Effective Program Management

PROGRAM MANAGEMENT

What is Program Management?

Monitoring of Schedule, Budget, Quality and Staff Resources to help make good business decisions in a DB construction program with multiple projects

Who can benefit from Program Management?

Any Medical Group implementing a Program for Construction of Surgical Facilities, especially Design-Build where the Contractor is the Designer

What are the Primavera Enterprise Tools?

Project Management, Methodology Manager, MyPrimavera, Portfolio Analyst, Timesheets

PRIMAVERA TOOLS OVERVIEW

- Project Management Module
 - Allows program view of multiple projects
 - Owner needs monitoring ability for design performance portion of Contractor Design-Build
 - Owner needs visibility throughout process
 - Use for planning, tracking, and controlling projects.
 - Store and manage all projects in a central location.
 - Provides consolidated summary information
 - Provides in-depth analysis tools for schedulers
 - Partnering with DB Contractor requires a system

PRIMAVERA TOOLS OVERVIEW

- MyPrimavera Module
 - Combines any number of projects for a program view
 - Provides an interface for project managers who require Web-enabled project management functionality.
 - Users can create, manage, status, and schedule projects using their Web browsers.
 - Provides different views based on specific functionality and data access for the different roles that exist on a project team.

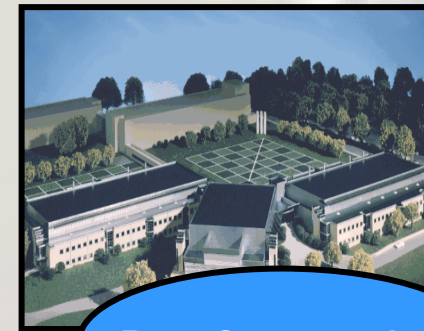
PROGRAM MANAGEMENT SERVICES



Planning & Design

	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
BR 4029												
Pier Placement												
Execute Pier Footing												
Install Test Pile - 2												
Covered & Remove Paved Sta 8-88 Loop Rd												
Install Pier - Pier - 12 Pile - 22 Battered												
Clean & Cut Piles To Grade												
Install Pier Footing Concrete												
Install PPS Pier Stem Concrete												
Abutment "A" Placement												
Execute for Abutment "A" Footing												
Install Test Pile - 2												
Install Pier Abut "A" - 15 Pile - 32 Battered												
Clean & Cut Piles To Grade												
Install PPS Abutment "A" Footing Concrete												
Install PPS Abutment "A" Stem & Wing Wall												
Install Abutment "A" Class B Rip Rap												
Install Stone Backwall (After Deck Pile)												
Abutment "B" Placement												
Execute for Abutment "B" Footing												
Install Test Pile - 2												
Install Pier Abut "B" - 15 Pile - 28 Battered												
Clean & Cut Piles To Grade												
Install PPS Abutment "B" Footing Concrete												
Install PPS Abutment "B" Stem & Wing Wall												
Install Abutment "B" Class B Rip Rap												
Install Stone Backwall (After Deck Pile)												
Superstructure Placement												
Install Precast Concrete Girders												
Install Concrete (Superstructure Run 4)												
Install Form Overhang and Edges												
Install PPS Steel Deck												

Construction



Post Construction

*Success in Program Management Services
Requires Performance that is*

Thorough ♦ Proactive ♦ Responsive ♦ Communicative

PROGRAM MANAGEMENT SERVICES



Planning & Design

- ◆ Design Goal Management
- ◆ Coordination of Designers & Consultants
- ◆ Pre-bid Schedule Development
- ◆ Constructability Review
- ◆ Cost Management
- ◆ Value Engineering
- ◆ Analysis of What-if Scenarios for Construction Alternates
- ◆ Monitor Achievement of Performance Goals at early stages

PLANNING AND DESIGN

Owner Objectives

- Provide a Program for Multiple Project CM Packages
- Allow Program-Wide Decisions
- Improve Planning for Upcoming Projects
 - Resource & Manpower Planning
 - Ability to Examine Different Methods of Construction
 - Examination of Project Duration
- Flexibility in Creating Financial Models
- Good Communication Among Full Team
- Provides Program Uniformity in Peer Review & Certification of Surgical Facilities

PLANNING AND DESIGN

Construction Management Solutions

- Projects are easily coordinated and managed through the system organization.
 - Enterprise Project Structure
 - Organizational Breakdown Structure
 - Work Breakdown Structure



CONSTRUCTION MANAGEMENT

Enterprise Project Structure (EPS)

Project ID	Project Name
TMS	Tidewater Medical System
HRDist	Hampton Roads District
Template	Schedule Templates
Peninsula	Peninsula Area
Rural	Rural Area
FedMaint	Federal Maintenance
Maintenance	Maintenance Projects
Admin by Others	Administration by Other Parties
Temporary	Working / Temporary Files
Urban	Urban Areas

EPS ID: VDOT EPS Name: Virginia Department of Transportation

Responsible Manager: VDOT

- ◆ **Big Picture – Program Organization**
- ◆ **Can Organize Projects by :**
 - ❖ *Type – Plastic Surgery, Orthopedic*
 - ❖ *Location – Medical System, District*
 - ❖ *Funding Source – Private, Federal, State, Local*
 - ❖ *Budgets – Capital Improvement, Maintenance*

CONSTRUCTION MANAGEMENT

Enterprise Project Structure (EPS)

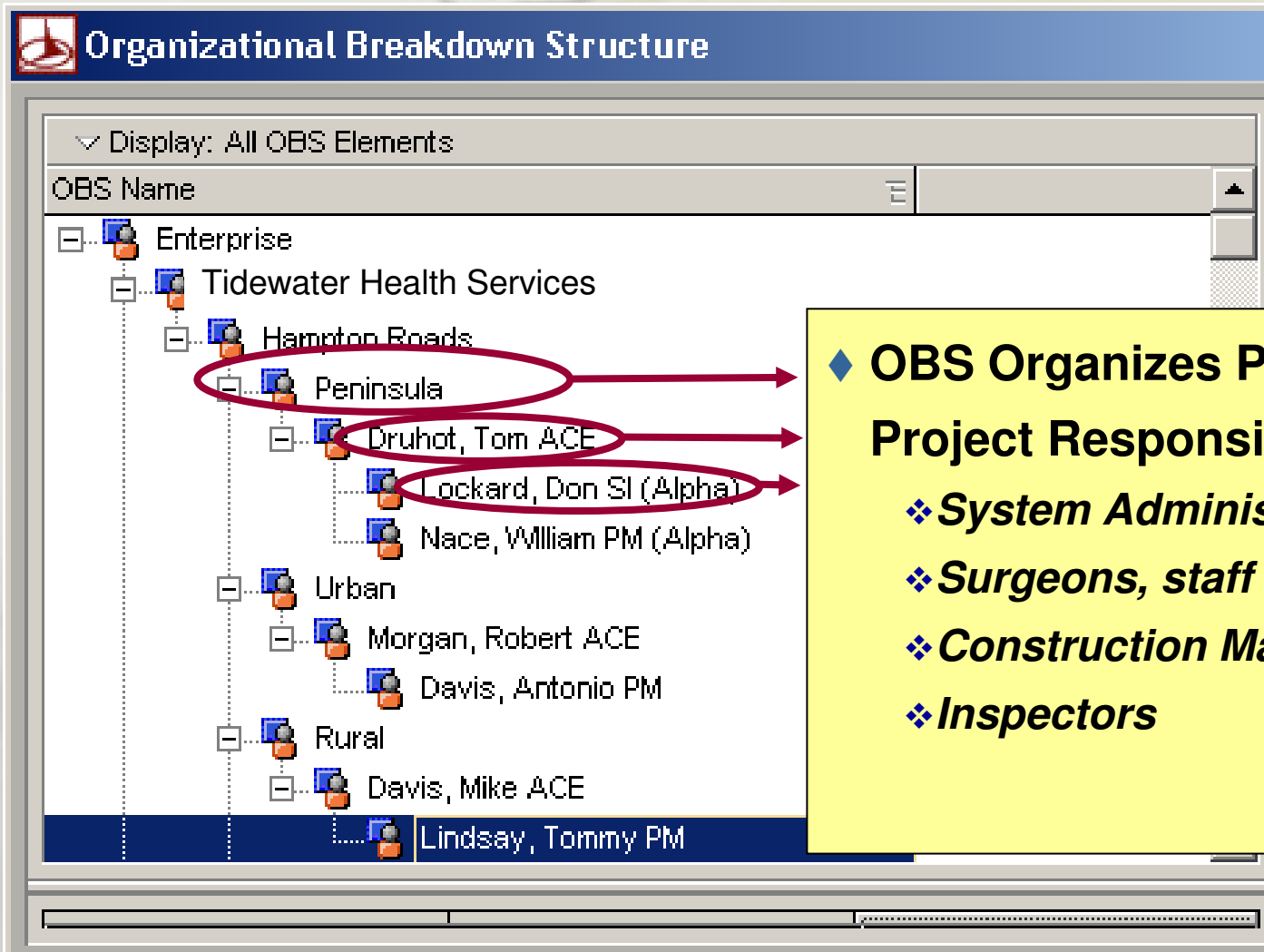
Project ID	Project Name	Responsible Manager	Start	Finish	BL Project Start	BL Project Finish
■ Tidewater Health Services			14-Apr-99 A	14-Oct-15	14-Apr-99	14-Oct-15
■ ◆ HRDist	Hampton Roads District	Hampton Roads	14-Apr-99 A	14-Oct-15	14-Apr-99	14-Oct-15
◆ Template	Schedule Templates	Test	24-May-13	14-Oct-15	24-May-13	14-Oct-15
◆ Peninsula	Peninsula Area	Peninsula	14-Feb-06 A	28-Nov-13	19-Apr-06	28-Nov-13
◆ Rural	Rural Area	Rural	12-Sep-06 A	14-Oct-15	13-Oct-06	14-Oct-15
◆ FedMaint	Federal Maintenance	FedMaint - Raymo...	30-Apr-07	14-Oct-15	30-Apr-07	14-Oct-15
◆ Maintenance	Maintenance Projects	VDOT	14-Apr-99 A	31-Jul-09	14-Apr-99	31-Jul-09
◆ Admin by Others	Administration by Other Pa...	Hampton Roads	08-Aug-06 A	01-Mar-12	14-Jun-06	01-Mar-12
◆ Temporary	Working / Temporary Files	Test	16-Jan-06 A	01-Dec-06	15-Aug-05	01-Dec-06
◆ Urban	Urban Areas	Urban	20-Sep-04 A	14-Oct-15	20-Sep-04	14-Oct-15

**Projects are Organized by Areas
within the Standard EPS**

**Expand each Area EPS to View Status
of Current Area Projects**

CONSTRUCTION MANAGEMENT

Organizational Breakdown Structure (OBS)



◆ OBS Organizes Personnel by Project Responsibility

- ❖ *System Administrators*
- ❖ *Surgeons, staff*
- ❖ *Construction Managers*
- ❖ *Inspectors*

CONSTRUCTION MANAGEMENT

Work Breakdown Structure (WBS)

Primavera : G93-020107R2 Peninsula Plastic Surgery

File Edit View Project Enterprise Tools Admin Help

Work Breakdown Structure

WBS Code	Actual Total Cost	WBS Name	Cost % of Budget	Schedule % Complete	Duration % of Original	Forecast Finish Date	Feb 2007	March 2007
G93-020107R2	\$9,391,921.02	Rivanna Medical Group	53.92%	61.4%	68.41%	Aug-29-07	2	19
G93-020107R2.1.C	\$0.00	Mods - Upgrades	0%	0%	315.89%		26	05
G93-020107R2.1.C	\$613,930.07	Facility Maintenance	100%				12	19
G93-020107R2.1.C	\$2,664.00	Procurement and Submittals	100%					26
G93-020107R2.1.C	\$2,664.00	Submittals	100%					26
G93-020107R2.1.C	\$8,775,326.95	CONSTRUCTION	52.23%					26
G93-020107R2.1.C	\$2,312,242.16	Route 60 Warwick Blvd Phase I(A)	102.07%					26
G93-020107R2.1.C	\$4,322,043.22	Route 60 Warwick Blvd Phase I(B)	91%					26
G93-020107R2.1.C	\$394,081.42	Route 60 Warwick Blvd Phase I(C)	26.44%					26
G93-020107R2.1.C	\$1,315,541.80	Route 60 Warwick Blvd Phase I(D)	63.78%					26
G93-020107R2.1.C	\$0.00	Contract Changes Phase 1D	0%					26
G93-020107R2.1.C	\$310,977.96	Route 60 Warwick Blvd Phase II	11.44%					26
G93-020107R2.1.C	\$119,440.40	Route 60 Warwick Blvd Phase III (B)	3.4%					26
G93-020107R2.12	\$0.00	Route 60 Warwick Bld Project Closure	0%					26

General Notebook Planning Resources Budget Log Spending Plan Budget Summary WBS Milestones

Budget	Variance	Spending Plan
Current Budget	Current Variance	Total Spending Plan
\$0.00	\$0.00	\$0.00
Unallocated Budget		Undistributed Current Variance
\$0.00		\$0.00
Distributed Current Budget		Total Spending Plan Tally
\$0.00		\$0.00
		Total Benefit Plan Tally
		\$0.00

Portfolio: All Projects User: kpoyner Data Date: Feb-01-07 Access Mode: Shared Baseline: Route 60 (Warwick Boulevard) Aug 5th thru Sept

◆ WBS Organizes Work by individual elements

❖ Use of Consistent Coding allows quick analysis

❖ WBS allows fast summarization of cost of work elements

PLANNING AND DESIGN

Planning for Upcoming Projects

- In-house Pre-Bid Schedules provide long-term planning opportunities
 - Cost loading with predicted costs shows future funding needs
 - Cash Flow predictions can be made
 - Resource loading with estimated numbers of Designers, Construction Managers, Project Managers, or Inspectors shows future manpower needs

PLANNING AND DESIGN

Planning for Upcoming Projects

- Alteration of variables allows for analyzing different construction methods:
 - Resource Availability
 - Costs for alternates
 - Production Rates (due to funding constraints, permitting issues, labor availability, etc.)
- Project durations are calculated from variables, finding the “best fit” duration for time and cost

PLANNING FOR UPCOMING PROJECTS

Project ID	Project Name	Responsible Manager	Start	Finish	BL Project Start	BL Project Finish
+	Maintenance	Maintenance Projects				
		TMS Facilities	14-Apr-99 A	31-Jul-09	14-Apr-99	31-Jul-09
+	Admin by Others	Administration by Other Pa..				
		Maintenance	08-Aug-06 A	01-Mar-12	14-Jun-06	01-Mar-12
+	Temporary	Working / Temporary Files				
		Utilities	16-Jan-06 A	01-Dec-06	15-Aug-05	01-Dec-06
-	Urban	Urban Areas				
		Urban	20-Sep-04 A	14-Oct-15	20-Sep-04	14-Oct-15
	01765		09-Jun-09	27-Oct-11	09-Jun-09	27-Oct-11
	01896 Prebid	Hampton Roads Center	31-Aug-06 A	10-Nov-09	08-Aug-06	10-Nov-09
	01896-Demo	Peninsula Surgical Center	11-May-06 A	13-Oct-06	19-Apr-06	26-Jan-07
	01904	Plastic Surgery of VB	09-Jun-09	27-Oct-11	09-Jun-09	27-Oct-11
	08300	Ben Hugo, M.D.	13-Oct-09	01-Mar-12	13-Oct-09	01-Mar-12
	09783	Center for Aesthetic Care	09-Jun-09	27-Oct-11	09-Jun-09	27-Oct-11
	11754 ICPM				22-Nov-06	13-Jan-11
	12379 Current				11-Oct-05	07-Aug-09
	12546				24-May-13	14-Oct-15
	12549 Prebid				13-Oct-06	15-Jul-10
	13485 ICPM					
	14672				01-Jan-07	20-May-09
	15827				10-Mar-09	28-Jul-11
	17546				14-Aug-07	31-Dec-09
	17568				24-May-13	14-Oct-15
	52147				11-Sep-07	28-Jan-10
	52148				10-Jul-07	26-Nov-09
	52150				12-Feb-08	01-Jul-10
	52365				12-Sep-06	19-Jan-09
	57048				08-Jan-08	27-Mar-10

◆ **In-House Schedules**

- ◆ *Cost loaded*
- ◆ *Resource Loaded*

◆ **Organizes long-term schedule and predicts funding and manpower needs**

PLANNING FOR UPCOMING PROJECTS

Fiscal Planning

Primavera : 12379 Prebid, 61322, 14672, 67200, 77432, 77428, 71883, 08342, 60034, 01896 Prebid, 18974 Prebid, ... (12379 Battlefield Bo... _ [] X

File Edit View Project Enterprise Tools Admin Help

Layout: Projects

Project ID	Baseline Data Date	Project Name	Data Date	Start	Finish	Current Budget	Remaining Total Cost
HRDist		Hampton Roads District		14-Apr-99 A	22-Mar-11	\$0.00	\$150,990,417.40
Hampton Template	19-Apr-06	Hampton Roads Project Template	19-Apr-06	19-Apr-06	05-Sep-08	\$0.00	\$0.00
Impl	15-May-03	HR Primavera Implementation Plan	04-Apr-06	24-Feb-06 A	12-Jun-06	\$0.00	\$0.00
MAINTENANCE BASELINE	01-Apr-99	Maintenance Projects - Baseline Schedule	14-Apr-99			\$0.00	\$0.00
MAINTENANCE UPDATE	14-Apr-99	Maintenance Projects - Current Update	14-Jun-06			\$0.00	\$0.00
Shim Template	19-Apr-06	Shim Project Template	19-Apr-06	19-Apr-06	05-Sep-08	\$0.00	\$0.00
Urban		Urban Areas		20-Sep-04 A	22-Mar-11	\$0.00	\$127,345,491.98
01896-Demo	19-Apr-06	01896 Chincoteague Demolition	19-Apr-06	19-Apr-06 A	01-Aug-06	\$17,298,888.88	\$61,811.20
01896 Prebid	01-Aug-06	01896 Chincoteague Route 175 Bridge	01-Aug-06	08-Aug-06	10-Nov-11	\$76,500,000.00	\$0.00
11754 Prebid	01-Jan-07	11754 Birdneck	01-Jan-07	02-Jan-07	22-Mar-11	\$17,788,888.88	\$0.00
12379 ICPM	20-Mar-06	12379 Battlefield Blvd and I64 Interchange ICPM	20-Mar-06	20-Mar-06 A	23-Jun-09	\$0.00	\$0.00
12379 Prebid							\$109,210,780.91
12549 Prebid							\$0.00
13485							\$5,040,499.87
14672							\$0.00
61322							\$0.00
70552							\$13,010,000.00
Peninsula							\$23,644,925.42
13429 Prebid							\$0.00
60034							\$2,163,301.13
67200							\$0.00
71883							\$0.00
77428							\$21,481,624.29
77430 Prebid							\$0.00
77432							\$0.00
Rural							\$0.00
08342							\$0.00
18974 Prebid							\$0.00
Temporary							\$0.00
CurrentProjects	01-Jan-05	CurrentProjects	24-Jul-06	24-Jul-06	28-Jul-06	\$0.00	\$0.00
CurrentProjectsUpdat	24-Jul-06	CurrentProjectsUpdate	24-Jul-06	14-Apr-99 A	31-Jul-09	\$0.00	\$0.00

- ◆ Fiscal Planning allows for adjustment of project starts or examination of proposed phasing plans
- ◆ Helps accommodate available funding, especially in cash flow income streams

PROGRAM MANAGEMENT SERVICES



Planning & Design

Task	Start	End
Execute Pier Footing	Jul	Aug
Place Concrete	Aug	Sep
Execute Abutment 'A' Footing	Aug	Oct
Place Concrete	Oct	Nov
Execute Abutment 'B' Footing	Oct	Dec
Place Concrete	Dec	Jan
Execute Superstructure Placement	Jan	Mar

Construction

- ◆ Full Program Design & Maintenance
- ◆ Construction Management
- ◆ Schedule Analysis
- ◆ Time Impact Analysis/What-if Scenarios
- ◆ RFI & RFP tracking
- ◆ Documentation
- ◆ Quality Control Management
- ◆ Coordination / Communications
- ◆ Risk Analysis

CONSTRUCTION

Owner Objectives

- Implement Project Controls for Construction Projects
 - Analyze and Maintain CPM Schedules
 - Document Physical Percent Complete and Estimates to Complete
 - Provide Tools for Time Impact Analysis
- Provide a Program Containing CM Packages
 - Document Control & Communication
 - Issue/Risk Identification
- Prepare and Coordinate Cost Performance Reports

CONSTRUCTION

- Primavera provides one tool for analysis, complete with layouts and filters that enable quick, efficient analysis in support of organizational goals
 - Project Management Module for in-depth access to analysis tools
 - MyPrimavera Module for program-wide project views and communication

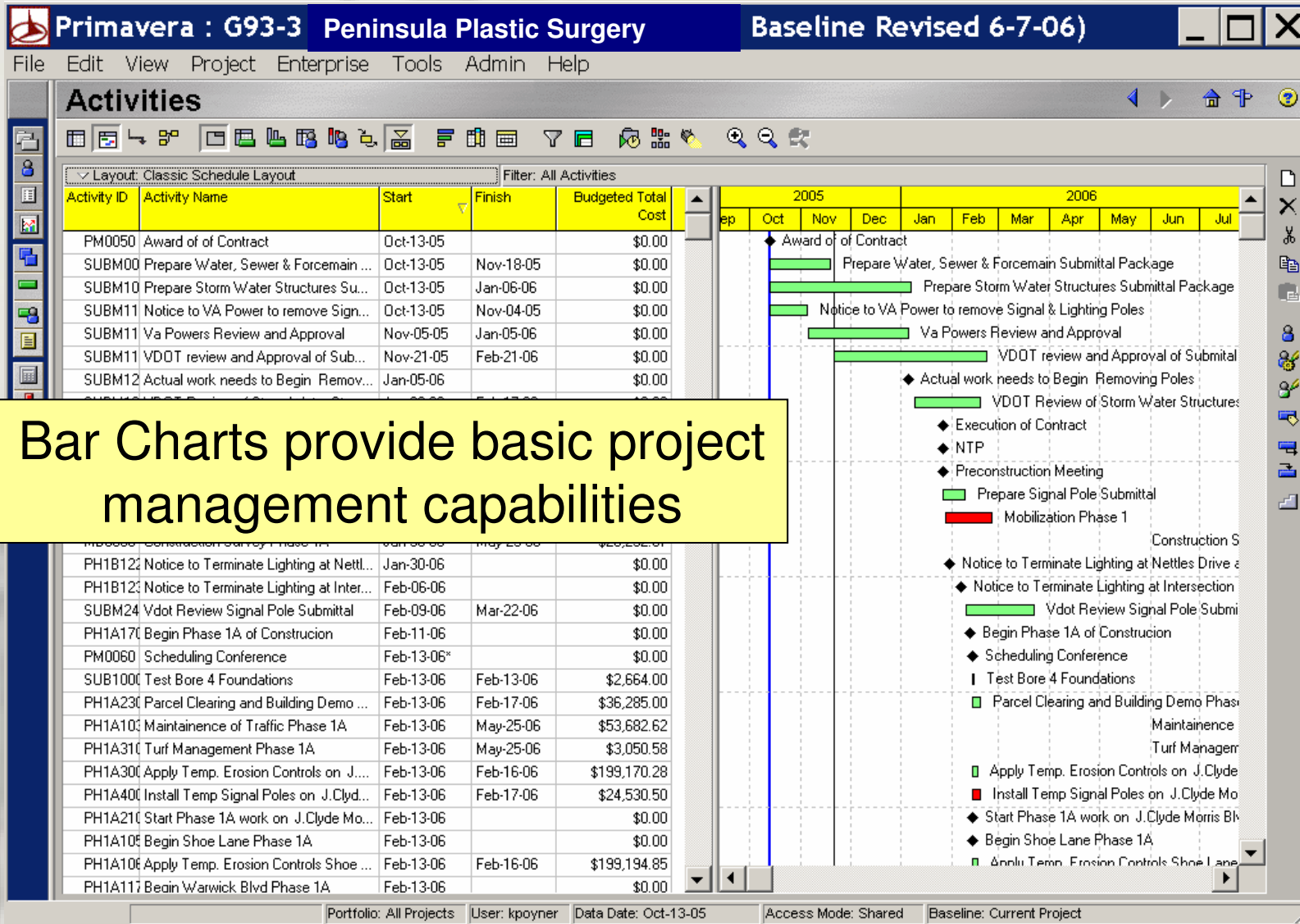
CONSTRUCTION

Project Controls

- CPM Schedules required by:
 - Project Specifications
 - Cost Loading requirements
- CPM and TIA analysis ensures Owner participation in funding needs for changes
- All project documentation recorded electronically, linked to each issue, analysis, request for change, etc.

PROJECT CONTROLS

Classic Bar Chart



Bar Charts provide basic project management capabilities

PROJECT CONTROLS

Critical Path View

Primavera : G93-3 Peninsula Plastic Surgery Baseline Revised 6-7-06)

File Edit View Project Enterprise Tools Admin Help

Activities

Layout: Norf - Longest Path Filter All: Critical

Activity ID	Activity Name	Original Duration	Activity % Complete	Start	Finish
PH22130	Install Paver Crosswalks on Phase 2	5	0%	Nov-20-06	Nov-30-06
PH22140	Install Temp Markings on Phase 2	2	0%	Dec-04-06	Dec-05-06
PH22430	Relocate Barricades and Signs on Ph...	1	0%	Dec-06-06	Dec-06-06
PH21110	Complete Phase 2	0	0%		Dec-06-06
PH3B1120	Begin Work on Phase 3 B	0	0%	Dec-08-06	
PH3B1810	Pavement Demo on Phase 3 B	3	0%	Dec-08-06	Dec-12-06
PH3B2360	Install drainage Structures on Phase ...	14	0%	Dec-15-06	Jan-08-07
PH3B2160	Install Geotextile Fabric on Phase 3 B	3	0%	Jan-10-07	Jan-12-07
PH3B2170	Install Borrow Fill Material on Phase 3 B	4	0%	Jan-15-07	Jan-19-07
PH3B2180	Install 21 B Stone on Phase 3 B	4	0%	Jan-22-07	Jan-26-07
PH3B2220	Install Concrete Curb & Gutter CG-6 o...	4	0%	Jan-29-07	Feb-01-07
PH3B2390	Install Concrete Entrance way on Pha...	4	0%	Feb-02-07	Feb-08-07
PH3B2260	Install Asphalt BM-2 on Phase 3 B	4	0%	Feb-09-07	Feb-15-07
PH3B2270	Install Asphalt IM-19 on Phase 3 B	3	0%	Feb-16-07	Feb-20-07
PH3B2300	Install Paver Crosswalks on Phase 3 B	5	0%	Feb-21-07	Feb-28-07
PH3B2310	Install Temp Markings on Phase 3 B	2	0%	Mar-01-07	Mar-02-07
PH3B2410	Install Road Way Signs on Phase 3 B	5	0%	Mar-01-07	Mar-08-07
PH3B2400	Pavement Milling on Phase 3 B	3	0%	Mar-05-07	Mar-08-07
PH3B2360	Install Asphalt SM 9.5 A,D on Phase 3...	4	0%	Mar-09-07	Mar-14-07
PH3B2430	Perm...				
PH3B1150	Reloc...				
PC9950	Cons...				
PH3B1140	Comp...				
PC9960	State...				
PC9980	Proje...				
PC9970	122...				
PC9990	Subs...				

Critical and Near-Critical activities can be filtered for in-depth analysis

Portfolio: All Projects User: kpoynr Data Date: Oct-13-05 Access Mode: Shared Baseline: Current Project

PROJECT CONTROLS

Milestone Tracking

Primavera : G93-3 (Peninsula Plastic Surgery - Baseline Revised 6-7-06)

File Edit View Project Enterprise Tools Admin Help

Activity ID

PH3B1719
SUBM1200
PM0050
PH3B1120
PH1B1230
PH1B1000
PH1A170
PH1D1060
PH1A1050
PH1B1210
PH1A1170

PH1C1030 Begin Work on Phase 1C MI 0 May-26-06
PH21090 Begin Work on Phase 2 MI 0 Sep-12-06
PH1B1450 Begin work on Warwick Blvd & Shoe ... MI 0 Feb-28-06
PH1B1440 Complete Median Work along Warwick... MI 0 Jun-21-06
PH1A220 Complete Phase 1A MI 0 May-25-06
PH1A1040 Complete Phase 1A on J.Clyde Morris ... MI 0 May-25-06
PH1B1010 Complete Phase 1B MI 0 Jul-06-06
PH1C1050 Complete Phase 1C MI 0 Jun-30-06
PH1D1080 Complete Phase 1D MI 0 Sep-11-06
PH21110 Complete Phase 2 MI 0 Dec-06-06
PH1A1160 Complete Shoe Lane Phase 1A MI 0 Apr-05-06
PH1B1360 Complete Temp Signalization on Warw... MI 0 May-25-06
PH1A1280 Complete Warwick Blvd Phase 1A MI 0 May-19-06
PH3B1140 Complete Work on Phase 3 B MI 0 Mar-29-07
PH1B1460 Complete Work on Warwick Blvd/ Sho... MI 0 Jul-06-06
PC9950 Construction Calculated Completion D... MI 0 Mar-29-07
PM0040 CPM Final Due Admin 0 Mar 11 06

2006
Apr May Jun Jul Aug Sep

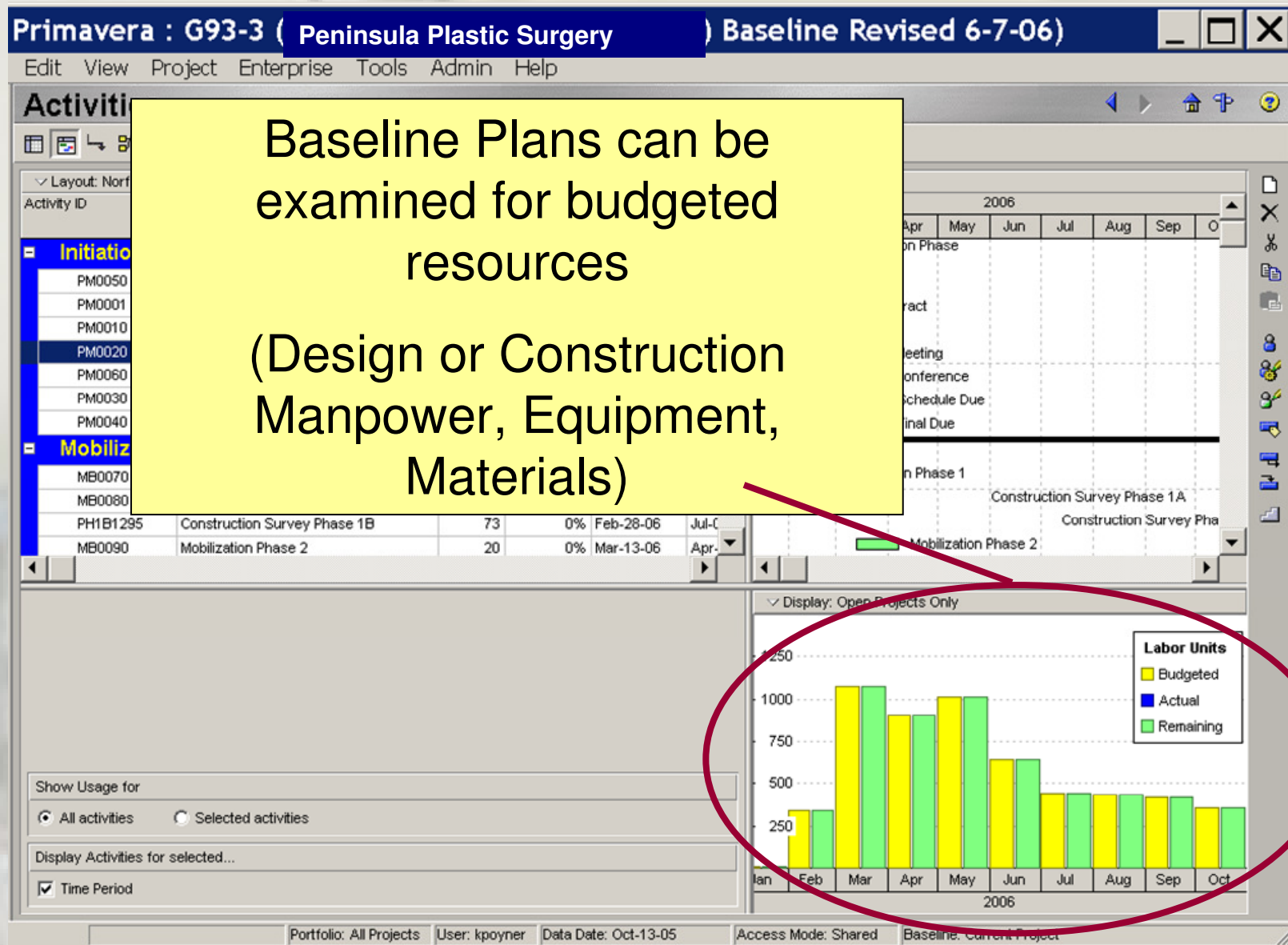
Begin Median Work along Warwick Blvd Stat 17.15
Begin Phase 1 B
Phase 1A of Construcion
Shoe Lane Phase 1A
Begin Temp Signalization on Warwick Blvd Phase 1B
Warwick Blvd Phase 1A
Begin Work on Phase 1C
Begin work on Warwick Blvd & Shoe Lane Phase 1B
Complete Median Work
Complete Phase 1A
Complete Phase 1A on J.Clyde Morris ...
Complete Phase 1B
Complete Phase 1C
Complete Shoe Lane Phase 1A
Complete Temp Signalization on Warw...
Complete Warwick Blvd Phase 1A
Complete Work on
CPM Final Due

Portfolio: All Projects User: kpoynier Data Date: Oct-13-05 Access Mode: Shared Baseline: Current Project

Milestone Tracking allows quick views of interim phase completion, inspection dates, project completion dates, peer review coordination as well as facility certification dates

PROJECT CONTROLS

Budgeted Resources View



SCHEDULE RESOURCE LOADING

LABOR



- ◆ *Designers, CM Staff & Inspectors*
- ◆ *Number of Crews*
- ◆ *Crew Composition*
- ◆ *Number of Shifts*
- ◆ *Work Days / Hours*

EQUIPMENT



- ◆ *Major Equipment*
- ◆ *Mobilization / Demobilization*
- ◆ *Crew Assignment*
- ◆ *Work Hours / Maintenance*

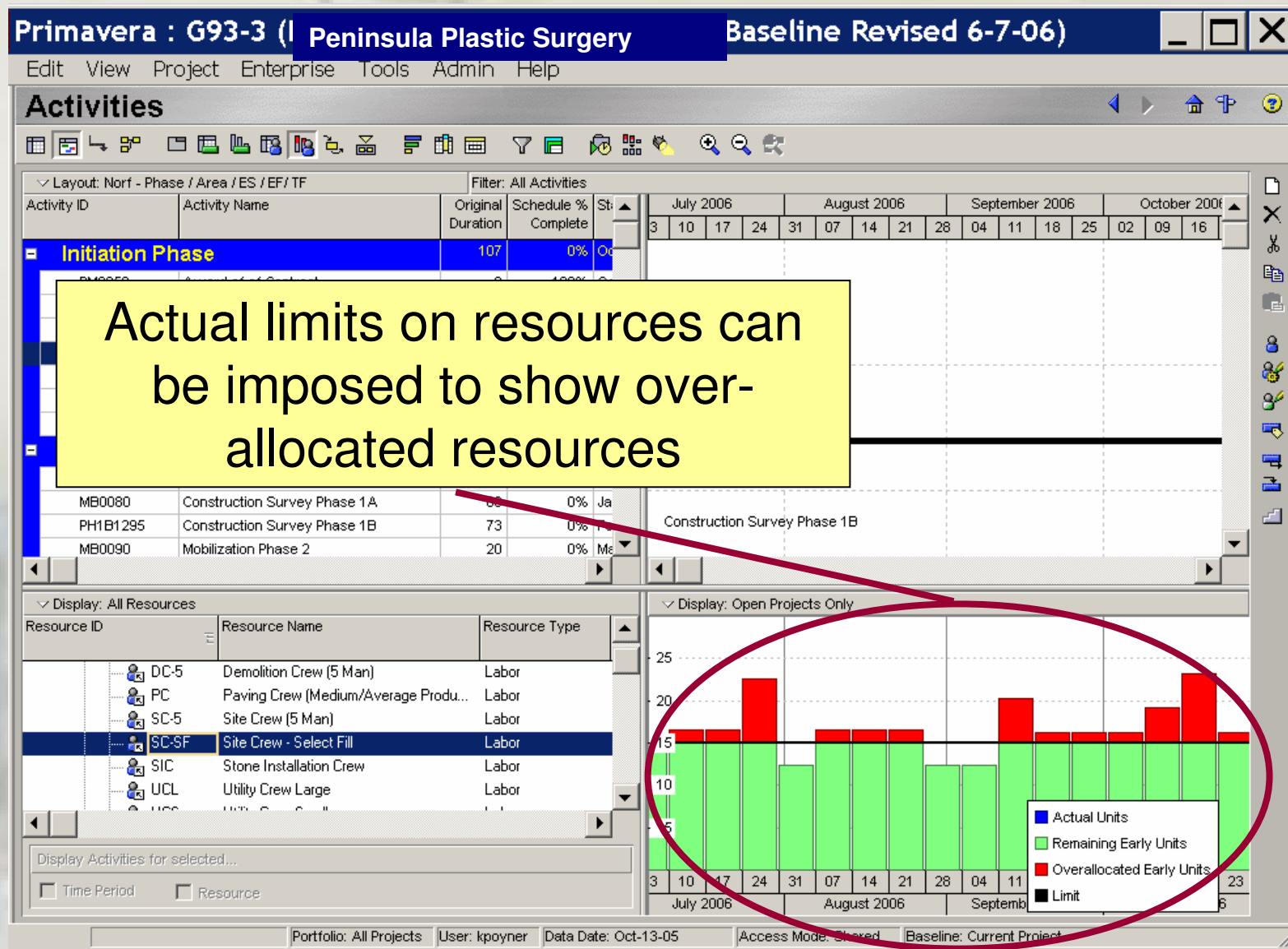
MATERIALS



- ◆ *Major Quantities*
- ◆ *Long Lead Items*
- ◆ *Pre-Approved*
- ◆ *Major Work Package Delivery*
- ◆ *Cash Flow Predictions*

PROJECT CONTROLS

Over-allocated Resources

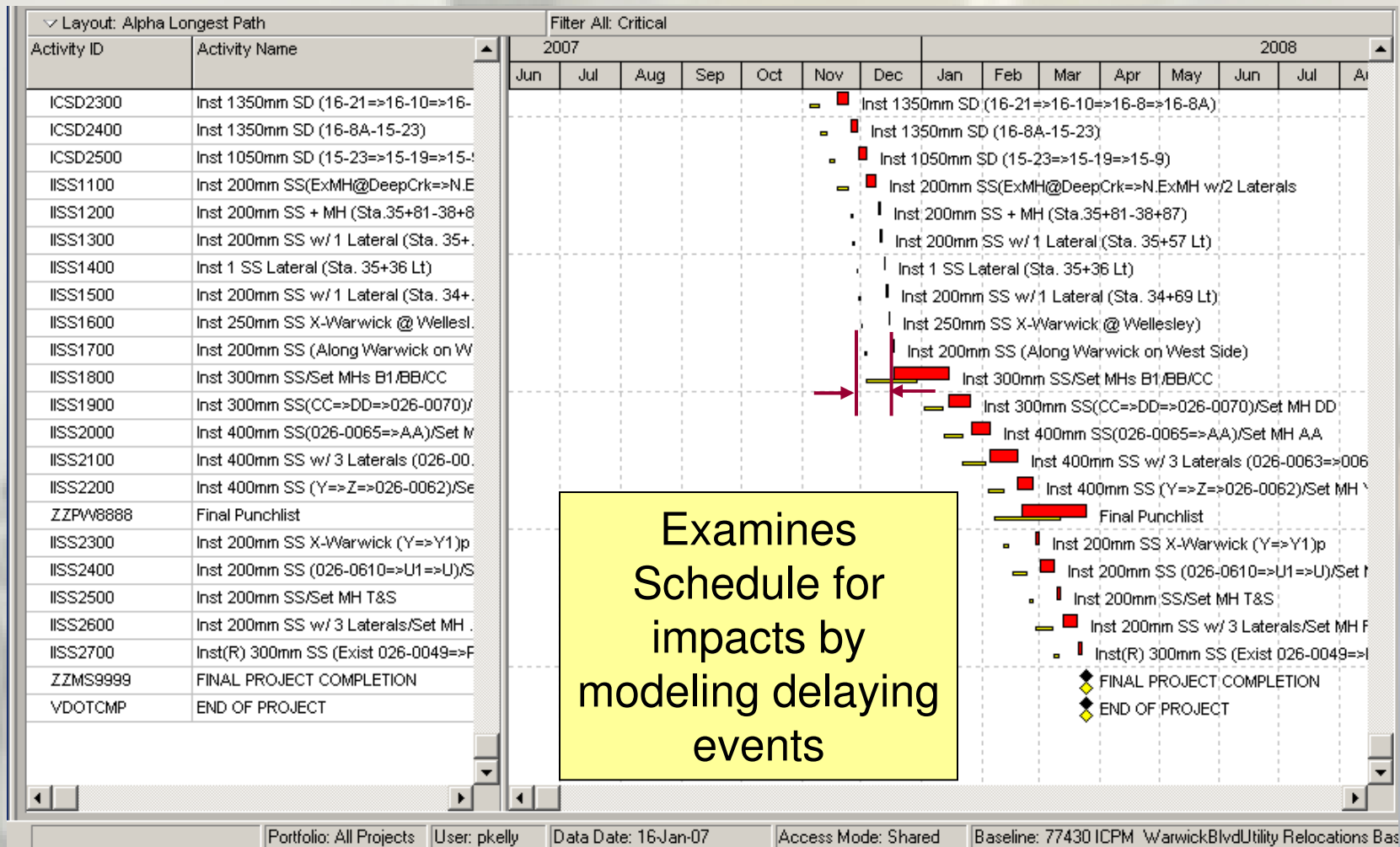


PROJECT CONTROLS

- Time Impact Analysis via CPM Scheduling
 - Provides the means to evaluate time/cost requests
 - Provides best way to maintain control of changed conditions and Owner change requests
 - Supports negotiation of time and cost
 - Fairly places calculated risk back on Contractor
 - Supported by case law

PROJECT CONTROLS

Time Impact Analysis



CONSTRUCTION

Program Management

- Facilitates Owner & CM review of entire program
- Keeps all team members in knowledge loop
- Allows at-a-glance view of program
 - MyPrimavera dashboards
 - Real time data availability
- Issue and Risk Identification
- Allows program-wide budget and cash flow analysis
- Allows sharing across projects of critical Designer and CM resources

CONSTRUCTION

Construction Management

- Improve internal communication and understanding of projects at project level
- Document Control
 - Printed Reports
 - RFI, Submittal, Change Management Logs
 - Correspondence Logs
- Issue and Risk Identification
- MyPrimavera allows roll-up program-wide review

CONSTRUCTION MANAGEMENT

MyPrimavera

- All data summarized to both Project and Program level information
- Access to real time information in Project Management Module
 - Dashboard Views
 - Simple Navigation
- Ability to communicate with project staff in a common workspace
- Owner Stakeholders can have custom workspaces to view as much detail as needed.

MyPrimavera

Dashboard Components

Primavera - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <https://ew17.myloa>

Google

Welcome, Kat Poyner

Personal Workspace

Related Actions Select an action...

Menu Hierarchy

Projects

- Project: Peninsula Plastic Surgery Center
- Project Workspace
- Project Team Usage
- Activity Hierarchy
- Activity List
- Project Details
- Project Baselines
- Project Tools
- Gantt Chart
- Project Issues
- Project Risks
- Documents
- Timesheet Approval

Issues

- Issues

Personal Workspace

Expand All Collapse All Customize

Filter by Project: Peninsula Plastic Surgery

- My Issues
- Schedule Performance
- Earned Value Performance
- Index Performance
- Project Statistics
- Notebook Topics
- My Risks
- My Reports
- My Activities Enter Time
- User Custom Portlet
- Communication Center
- My Projects
- Project Health

Done Internet

Customizable workspace allows team members to select views

MyPrimavera

Gantt Chart View

PRIMAVERA Welcome, Kat Poyner

Activity Hierarchy > Project Details > Gantt Chart

Menu Hierarchy <<

- Projects
 - Project: Peninsula Plastic Surgery Center
 - Project Workspace
 - Project Team Usage
 - Activity Hierarchy
 - Activity List
 - Project Details
 - Project Baselines
 - Project Tools
 - Gantt Chart**
 - Project Issues
 - Project Risks
 - Documents
 - Timesheet Approval
- Issues
 - Issues
 - Issue Codes
 - Issue Forms
 - Issue Form Categories

2007

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Peninsula PS Center ▶ 100%												
Site Plan Review 100%												
Building Plan Review 100%												
Initial Site Visit / Report 100%												
Monitor Construction												
Weekly Reports												
BiWeekly Report												
Monthly Audits												
Review Invoices												

Customize

Internet

MyPrimavera

Dashboard with Calendar

The screenshot displays the MyPrimavera web application interface. At the top, the Primavera logo is on the left, and the user is welcomed as 'Kat Poyner'. Below the header, there are navigation tabs for 'Personal Workspace' and 'Project Workspace', and a 'Related Actions' dropdown menu. The main content area is titled 'Project Workspace - Flint Ridge Proposal - EXAMPLE OVERVIEW w/ PROGRESS'. On the left, a vertical menu lists various project management tools, with 'Project Workspace' highlighted in red. The main area is divided into three panels: 'Project Statistics', 'Project Documents', and 'Project Calendar'. The 'Project Statistics' panel includes a 'Customize' section with 'Display' options (List selected, Group unselected) and a legend for risk levels: High (green circle), Medium (yellow triangle), and Low (red circle). Below this is a table with columns for Name, Project Owner, Start, and Finish. The 'Project Documents' panel has an 'Add Document' button and a table with columns for Title, Version, and Revision Date. The 'Project Calendar' panel shows a calendar for June 2007 with a grid of dates and a list of activities below it.

JUNE 2007						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Activities	
<input type="checkbox"/>	BiWeekly Report
<input type="checkbox"/>	Monitor Construction
<input type="checkbox"/>	Monthly Audits
<input type="checkbox"/>	Weekly Reports

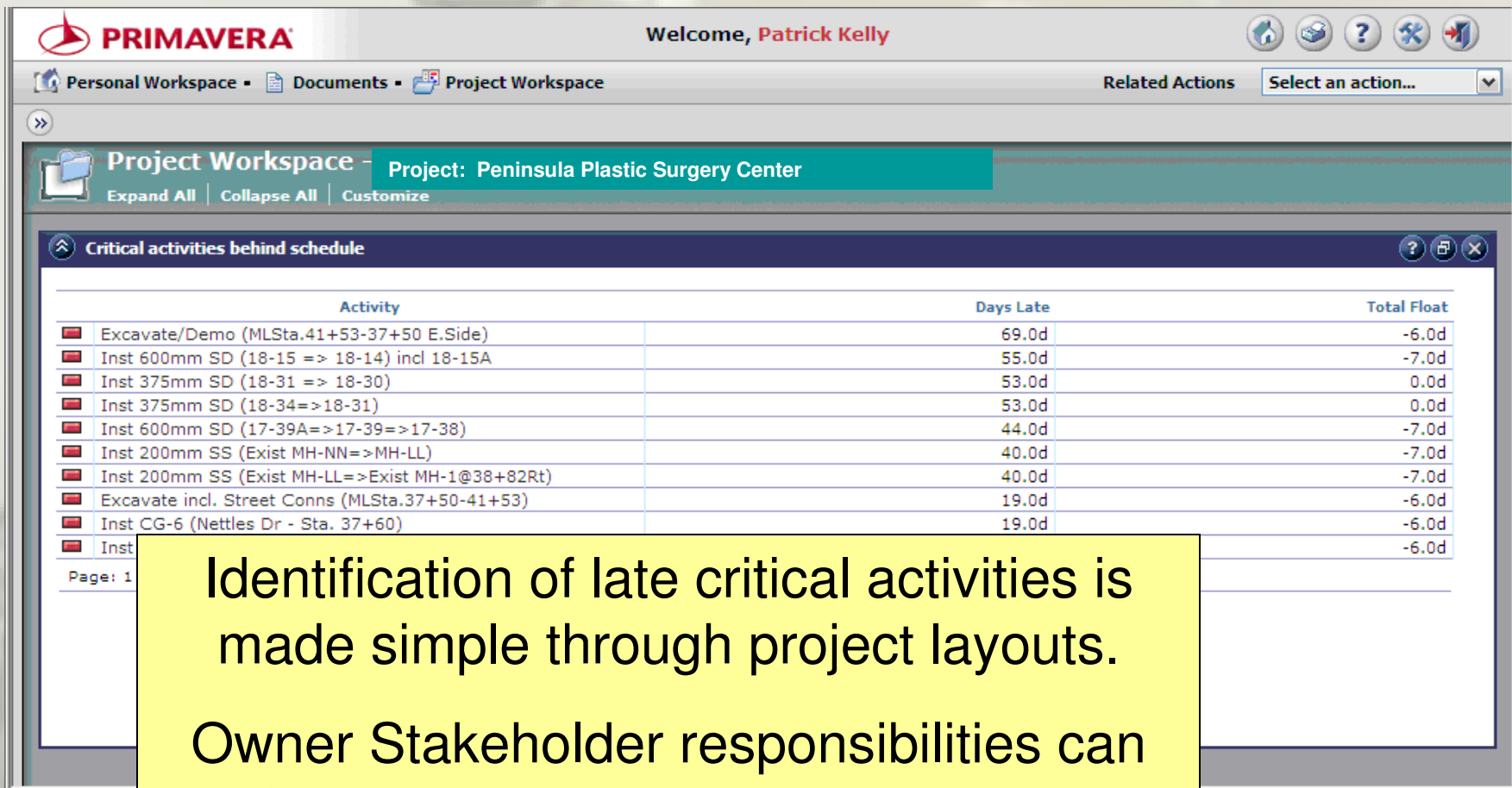
Project Documents		
Add Document	View	
Title	Version	Revision Date
Flint Ridge Proposal - EXAMPLE OVERVIEW w/ PROGRESS		

Project Statistics			
Name	Project Owner	Start	Finish
Flint Ridge Proposal - EXAMPLE OVERVIEW w/ PROGRESS		Apr-03-07	May

Project Statistics and Project Calendar available for overview

MyPrimavera

Tracking Critical Activities



The screenshot displays the MyPrimavera software interface. At the top, the Primavera logo is on the left, and the user name 'Welcome, Patrick Kelly' is on the right. Below the header, there are navigation tabs for 'Personal Workspace', 'Documents', and 'Project Workspace'. A 'Related Actions' dropdown menu is visible on the right. The main content area is titled 'Project Workspace - Project: Peninsula Plastic Surgery Center'. A window titled 'Critical activities behind schedule' is open, showing a table with the following data:

Activity	Days Late	Total Float
Excavate/Demo (MLSta.41+53-37+50 E.Side)	69.0d	-6.0d
Inst 600mm SD (18-15 => 18-14) incl 18-15A	55.0d	-7.0d
Inst 375mm SD (18-31 => 18-30)	53.0d	0.0d
Inst 375mm SD (18-34=>18-31)	53.0d	0.0d
Inst 600mm SD (17-39A=>17-39=>17-38)	44.0d	-7.0d
Inst 200mm SS (Exist MH-NN=>MH-LL)	40.0d	-7.0d
Inst 200mm SS (Exist MH-LL=>Exist MH-1@38+82Rt)	40.0d	-7.0d
Excavate incl. Street Conns (MLSta.37+50-41+53)	19.0d	-6.0d
Inst CG-6 (Nettles Dr - Sta. 37+60)	19.0d	-6.0d
Inst		-6.0d

Page: 1

Identification of late critical activities is made simple through project layouts.

Owner Stakeholder responsibilities can be filtered and shown in real time online reports for constant monitoring

MyPrimavera

Project Status & Budget

The screenshot displays the MyPrimavera interface. At the top, the PRIMAVERA logo is on the left, and the user is welcomed as Patrick Kelly. The navigation bar shows 'Personal Workspace' and 'Project Workspace'. The main content area is titled 'Project Workspace - Project: Peninsula Plastic Surgery Center'. Below this, a 'Project Statistics' window is open, showing a table of project phases with columns for Name, Start, Finish, Schedule % Complete, Remaining Material Cost, and Remaining Nonlabor Cost. A yellow callout box highlights the table content.

Project Statistics

Customize

Display List Group

Name	Start	Finish	Schedule % Complete	Remaining Material Cost	Remaining Nonlabor Cost
Phase 1, Peninsula Plastic Surgery Center	05-Jan-09	27-Apr-11	0%	\$3,225,219,152.00	\$1,351,560,000.00
	05-Jan-09	29-May-09	0%	\$3,225,000,000.00	\$1,350,000,000.00
	01-Jun-09	30-Aug-10	0%	\$188,352.00	\$1,560,000.00
	01-Jun-09	11-Nov-09	0%	\$15,400.00	\$0.00
	01-Jun-09	11-Nov-09	0%	\$15,400.00	\$0.00
	31-Aug-10	27-Apr-11		\$0.00	\$0.00

Dashboard View of Budgeted Costs and Actual Costs

MyPrimavera

Milestone Tracking

The screenshot shows the MyPrimavera web application interface. At the top, the Primavera logo is on the left, and the user is greeted with "Welcome, Patrick Kelly". Navigation tabs for "Personal Workspace" and "Project Workspace" are visible. The current project is "Project: Peninsula Plastic Surgery Center". The main content area is titled "Milestone Status" and contains a table with the following data:

Milestone Name	Responsible Resource	Due	Completed	Send e-mail
◆ Notice to Proceed		05-Jan-09		
◆ MEP Rough-ins Complete		29-May-09		
◆ Substantial Completion		11-Nov-09		
◆ Certification Team Visit		11-Nov-09		

Page: 1 of 1

A yellow callout box at the bottom of the screenshot contains the text: "Dashboard view of Project Milestone Status".

MyPrimavera

Issues View

The screenshot shows the MyPrimavera web application interface. The browser window title is "Primavera - Microsoft Internet Explorer". The address bar shows the URL "https://ew17.myloadspring.com/myprimavera/common/Home". The page header includes the Primavera logo and a welcome message for "Kat Poyner". The navigation menu shows "Project Risks", "Project Issues", and "Issues". The main content area displays a table of issues for the "Flint Ridge Proposal - EXAMPLE OVERVIEW w/ PROGRESS".

Issue Name	Priority	Responsible Manager	Owner	Resolution Date	Status	Description	E-mail
Onsite Conditions Preventing Start	Top	Chris Carson			Open		
RFI 023 - COP 002	Normal	Chris Carson			Open		

Page: 1 of 1

Quick and simple issue tracking and control

Input directly by Contractors

Resolved by Designers in system

Monitored by CM Agent & Owner

Viewed by all project team members

CONSTRUCTION MANAGEMENT

View of Project Issues

Primavera P3e/c for Construction - Project Manager: AA 6925187, AA 66051...

File Edit View Project Enterprise Tools Admin Help

Display: All Issues

Project	Issue	Date Identified		
AA 3145180	AA 3145180 - Project Status	22-May-03		Please send me an email with percent complete and amount paid on last e
AA 6015171	Re-alignment of 18" FM at Parol Plaza	13-Feb-03		May 9, 2003 - Redline revision #1 including modifications to 18" FM at ST
AA 6015171	Use 1 Stream Restriction	13-Feb-03		Date:08-May-03User:bdavitt No chang
AA 6015171	Existing BGE Pole at Ramp B	13-Feb-03	22-Feb-03	An existing BGE pole and guy wire conflict with excavation of Ramp B. Jof
AA 6015171	Subcontractor Questions on Signal Work	13-Mar-03		Date:08-May-03User:bdavitt Contractor is still waiting for respo
AA 6015171	TC Simmons requested onsite disposal area	13-Mar-03		08-May-03 Bill Davitt To: Bill Davitt (bill.davitt@alphacorporation.com)
AA 6015171	Sign Measurements for Lumintrak System	08-May-03		Subcontractor identified that existing overhead sign recieve new lumintrak
AA 6015171	CPM Update	04-Jun-03		TC Simmons 1/15/04 - Update Dec 2003
AA 6015171	Estimate Update US50	15-Aug-03	30-Aug-03	Please send me an email with the amount paid on the last estimate
AA 6015171	Jennifer Road Cable relocation at Ramp F	13-Mar-03		10/9/03 - County fiber cable to be relocated into existing Verizon conduit
AA 6015171	Overhead Sign OH-8	13-Mar-03	09-May-03	10/9/03 - Structure to be stored at SHA salt dome. Contractor has not sub
AA 6015171	MDT conflict MD2 south STA 30-38	15-May-03		6/7/03 - Contractor indicates that he is waiting for direction on how to pro
AA 6295171	Redline Revision #2 - Add Waterline at Gaither Dr	18-Dec-02		12/18/02 - Redline Revision #2 sent to District Office prior to partnering r
AA 6295171	Possible Gaither Drive Location Revision	23-Jan-03		Issue 37 days old 1/21/03 - Highway Design identified possible realignme
AA 6295171	Reinforced Earth Slope	15-Mar-03		10/13/03 Material for soldier pile with lagging wall delivered
AA 6295171	MDT changes on MD 174	27-Feb-03		7/24/03 - Temporary widening near Pamela approved to 44 feet off baseli
AA 6295171	MDT changes Ramp Jand I	23-Jan-03		6/26/03 Another meeting is needed to determine if this chagne can be app
AA 6295171	Redline #4 Guardrail on Gaither Dr	13-Aug-03		6/26/03 Final location deising and additional guardrail was given verbal N
AA 6295171	MDT changes Ramp K&L	13-Aug-03		6M request change to weekend closure on ramps7/30/03 - Six M submits

Details of Issues Readily Available to Project Staff

Issue Notes

Contractor letter of August 8, 2003 notifying SHA of potential delay and additional cost. During final proofrolling on 7/31/03 the subgrade was found 'pumping' and contractor is awaiting direction on corrective measures before placing GAB.

Week of 8/11/03 - Contractor directed to perform undercut.

CONSTRUCTION MANAGEMENT

View of Project Documents

The screenshot displays the Primavera P3e/c for Construction software interface. The title bar reads "Primavera P3e/c for Construction - Project Manager: AA 6295171 Tidewater Medical Systems - PPS". The menu bar includes File, Edit, View, Project, Enterprise, Tools, Admin, and Help. A table lists project documents, with the first row highlighted. A red oval highlights the table, and a yellow callout box points to it with the text "Project Documents Posted for Project Staff". Below the table is a detailed view of the selected document, showing fields for Title, Reference No., Version, Document Category, Status, Revision Date, Author, and a Deliverable checkbox.

Title	Reference No.	Status	Document Category
Initial CPM Review		Rejected	CPM Schedule Review
Revised Initial CPM Review		Rejected	CPM Schedule Review
Second Revision to ICPM Review		Approved	CPM Schedule Review
Change Order 1 for Time Extension		Under Review	Change Orders

Project Documents Posted for Project Staff

Document Details:

- Title: Initial CPM Review
- Reference No.: [Empty]
- Version: [Empty]
- Document Category: CPM Schedule Review
- Status: Rejected
- Revision Date: 13-Dec-02
- Author: [Empty]
- Deliverable:

MyPrimavera

Document Control

Project Documents

Add Document		View
Title		
▼	77430 Current Warwic	
<input type="checkbox"/>	Alpha Baseline Scheduling	
<input type="checkbox"/>	<u>Orthopedic Surgery of Hampton Roads</u>	

Page: 1 of 1

Adobe Acrobat Professional - [VDOT Warwick Blvd Baseline Analysis Final.pdf]

File Edit View Document Comments Tools Advanced Window Help

Create PDF Comment & Markup Send for Review

70%

Help

Alpha
ENGINEERING
CONSTRUCTION

Review of Baseline Schedule for
1 **Orthopedic Surgery of Hampton Roads**

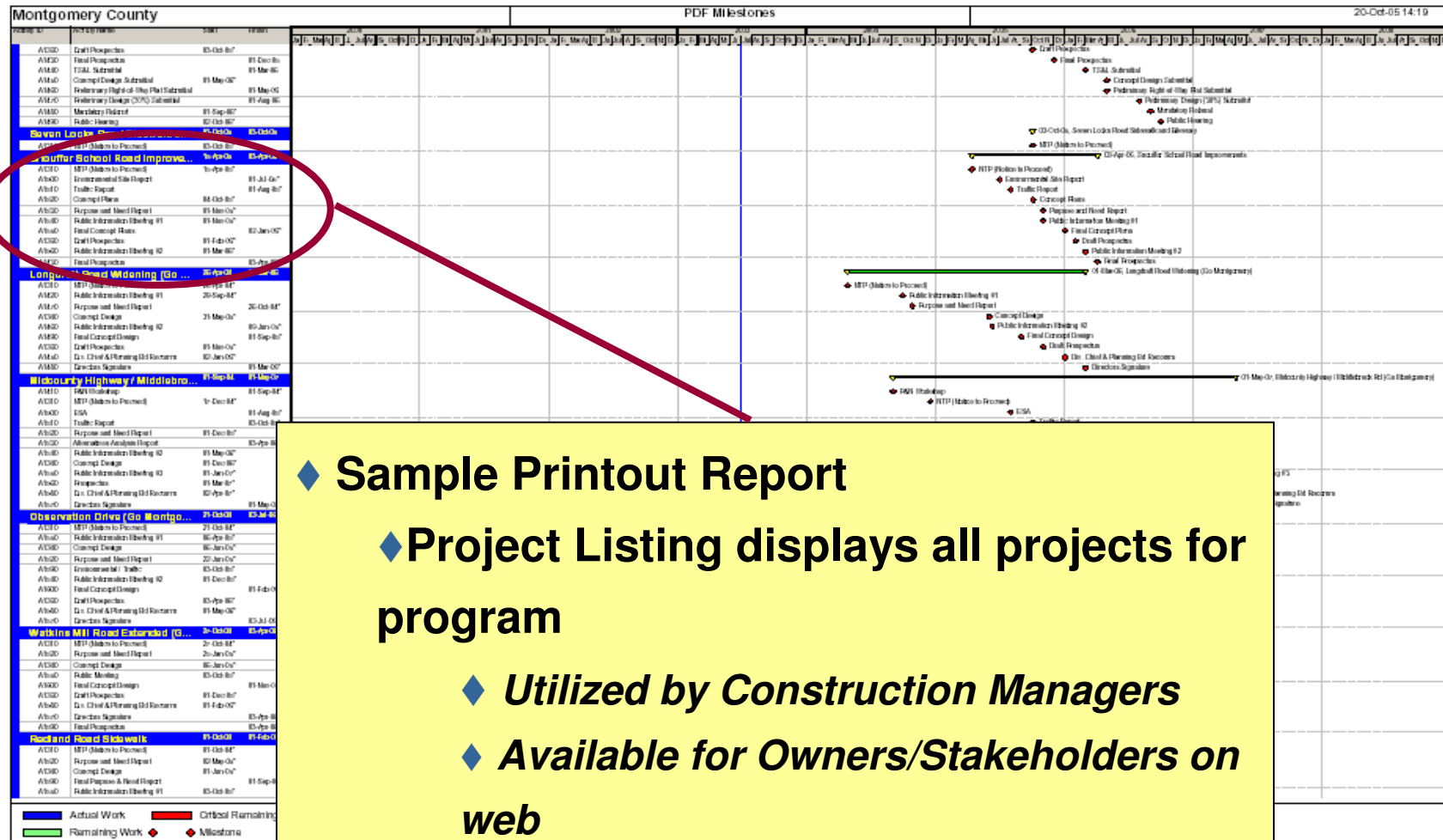
Virginia Department of Transportation
Hampton Roads District
1700 North Main Street
Suffolk, VA 23434

Prepared by
Alpha Corporation
101 West Main Street, Suite 715
Norfolk, VA 23510
(757) 533-9368

1 of 18

CONSTRUCTION MANAGEMENT

Project Milestones & Activities



- ◆ Sample Printout Report
- ◆ Project Listing displays all projects for program
- ◆ Utilized by Construction Managers
- ◆ Available for Owners/Stakeholders on web
- ◆ Available for all team members

CONSTRUCTION

Cost Reporting

- Project Management monitors Contractor's payments and Owner's internal costs
- Schedule updates contain current cost data
- All data exchange contained on website
- Owner has access to web based real time reports

COST REPORTING

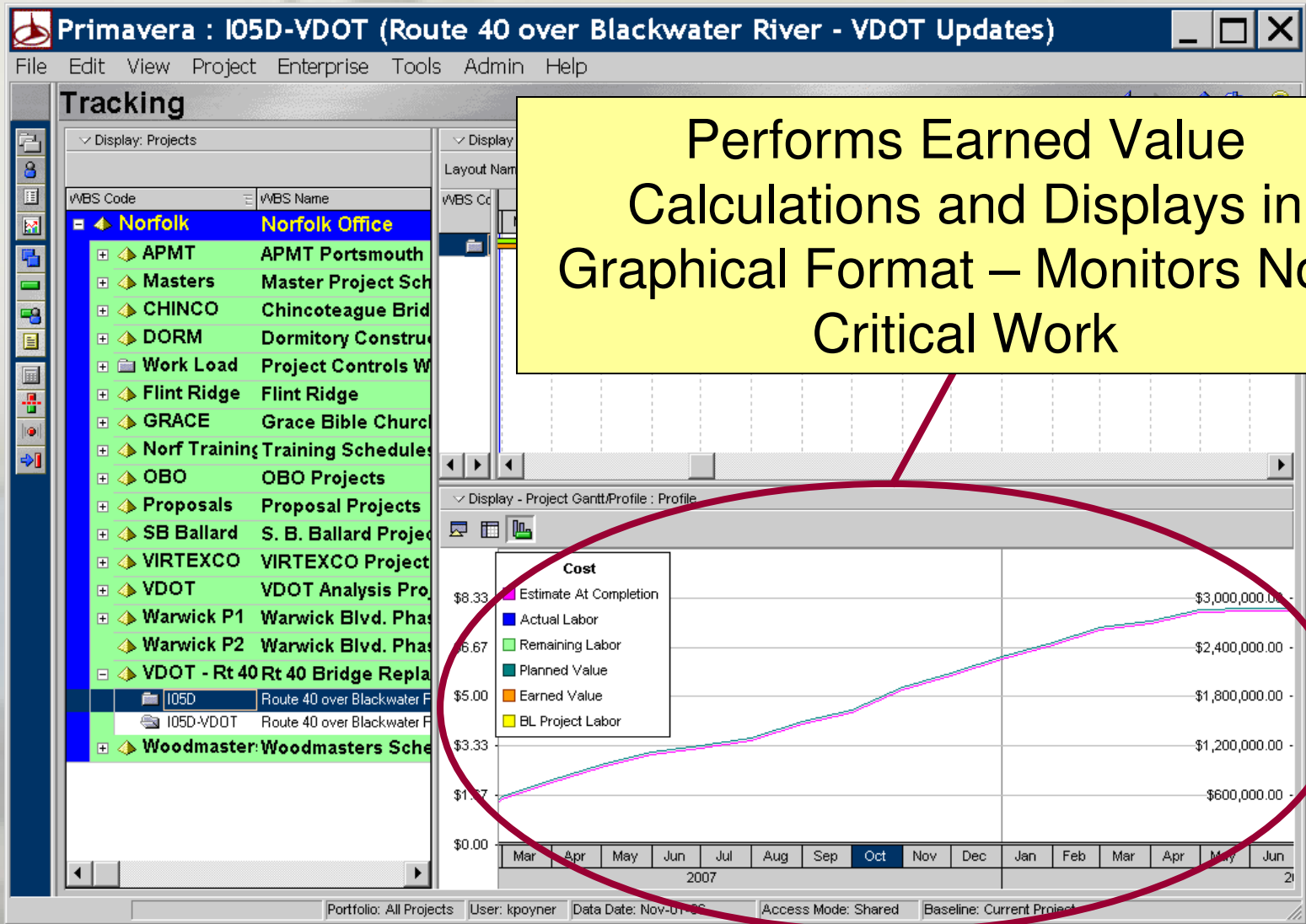
Current Budget Report

Expense Item	Expense Category	Rate	SYP Authorization	Original Contract Value	Budgeted Cost	Actual Cost	Remaining Cost	% Complete	Completion Cost
CEI	CEI	7.96		\$1,151,159.22	\$1,151,159.22	\$301,670.44	\$849,488.78	26.21%	\$1,151,159.22
CN	CN Budget		\$18,000,000.00	\$17,042,879.75	\$17,042,879.74	\$6,211,494.97	\$0.00	100%	\$6,211,494.97
Contingency	Contingency	9.96		\$1,438,949.02	\$1,438,949.02	\$17,888.18	\$1,361,142.32	5.41%	\$1,438,949.02
Contract	Contractor Payment			\$14,452,771.50	\$14,452,771.50	\$5,909,191.94	\$8,543,579.56	40.89%	\$14,452,771.50
Other	Other			\$0.00	\$0.00	\$0.00	\$0.00	0%	\$0.00

Tracks Internal Budget
and Costs

COST REPORTING

Current Budget Report



COST REPORTING

- Time and Cost Contingencies, Design, Construction, Other Budgets are assigned to all projects from Master Database
- Actual Spending in each budget category recorded for projects from database
- Budget Summary report printed monthly

COST REPORTING

Budget Summary Report

Budget summaries can be printed for all EPS levels

All users have ability to drill down into summary to review details

03-Aug-06

oads Budget Summary

ent Projected Finish Date 22-Mar-11

	<u>Budget</u>	<u>Actual</u>	<u>Remaining</u>
CEI	\$90,197,006.64	\$7,505,154.15	\$90,691,852.49
Contingency	\$9,809,561.77	\$0.00	\$9,809,561.77
Other	\$149,900.00	\$0.00	\$149,900.00

61322 Fleet Rec Park

Project Data Date 13-Oct-05 Current Projected Finish Date 22-Mar-11

	<u>Budget</u>	<u>Actual</u>	<u>Remaining</u>
CEI	\$0.00	\$0.00	\$0.00
Contractor Payment	\$0.00	\$0.00	\$0.00
Contingency	\$0.00	\$0.00	\$0.00
Other	\$0.00	\$0.00	\$0.00

14672 Hampton Boulevard (Rt. 337)


Project Data Date 13-Oct-05 Current Projected Finish Date 22-Mar-11

	<u>Budget</u>	<u>Actual</u>	<u>Remaining</u>
CEI	\$0.00	\$0.00	\$0.00
Contractor Payment	\$0.00	\$0.00	\$0.00
Contingency	\$0.00	\$0.00	\$0.00
Other	\$0.00	\$0.00	\$0.00

67200 Armistead Avenue

Project Data Date 13-Oct-05 Current Projected Finish Date 22-Mar-11

Page 1 of 6



Alpha Corporation

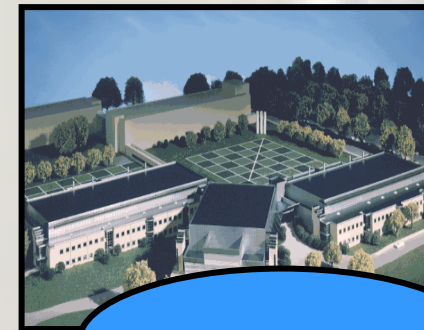
PROGRAM MANAGEMENT SERVICES



Planning & Design

BR 4029	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Pier Placement																								
Execute Pier Footing																								
Execute Test Pile 2																								
Covered & Remove Pile 0-60' Long Rd																								
Install Pier - 42 Piles - 22 Battered																								
Clean & Cut Piles To Grade																								
Install Pier Footing Concrete																								
Install Pile Stem Concrete																								
Abutment "A" Placement																								
Execute for Abutment "A" Footing																								
Execute Test Pile 0																								
Install Pier About "A" 15 Piles - 22 Battered																								
Clean & Cut Piles To Grade																								
Install Abutment "A" Footing Concrete																								
Install Abutment "A" Stem & Wing Wall																								
Install Abutment "A" Class 8 Rip Rap																								
Install Slope Backfill After Deck Pour																								
Abutment "B" Placement																								
Execute for Abutment "B" Footing																								
Execute Test Pile 0																								
Install Pier About "B" 15 Piles - 22 Battered																								
Clean & Cut Piles To Grade																								
Install Abutment "B" Footing Concrete																								
Install Abutment "B" Stem & Wing Wall																								
Install Abutment "B" Class 8 Rip Rap																								
Install Slope Backfill After Deck Pour																								
Superstructure Placement																								
Install Precast Concrete Girders																								
Install Concrete Slab-on-Deck Runoff																								
Install Formwork and Edging																								

Construction

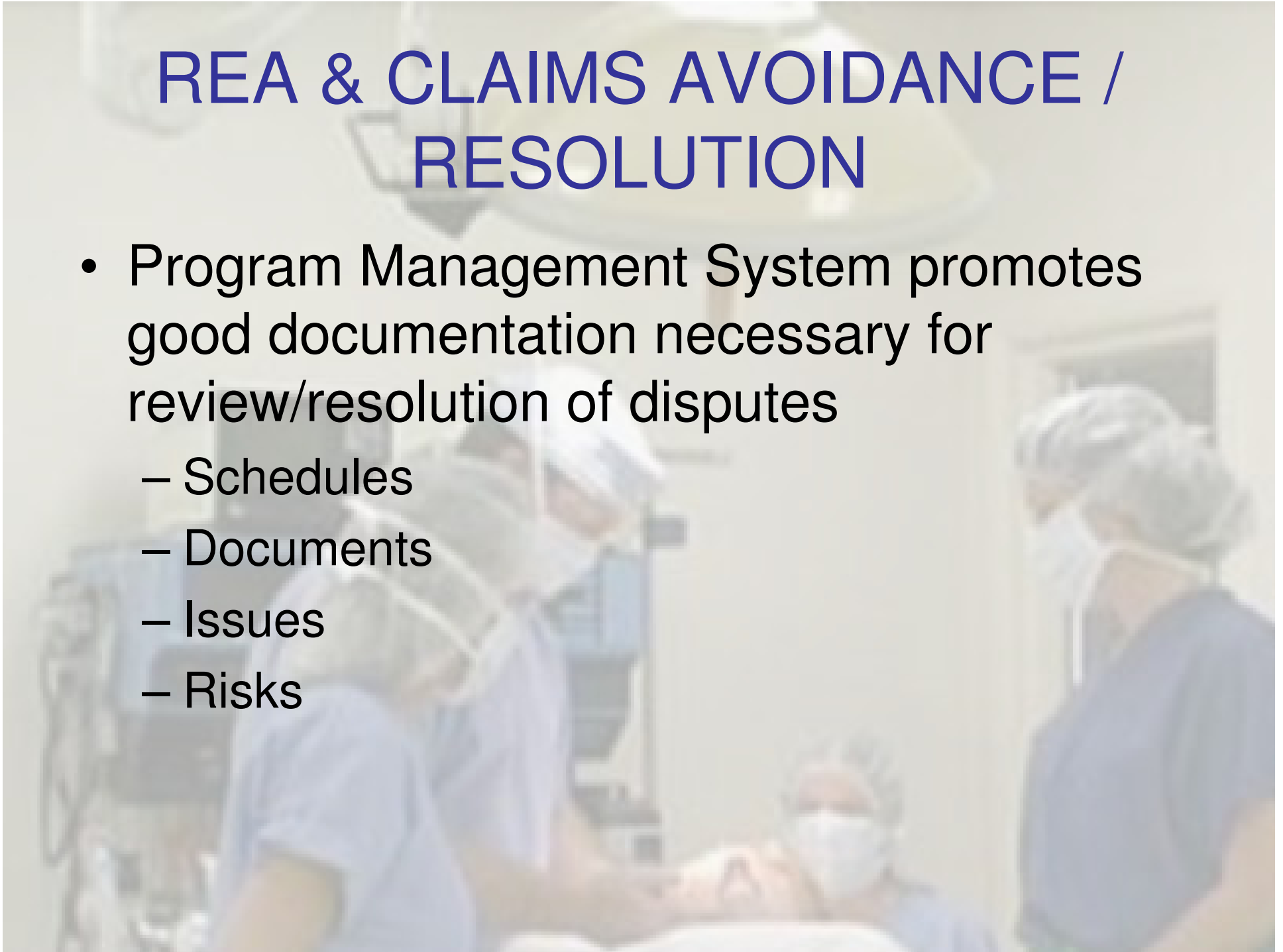


Post Construction

- ◆ Documentation Review
- ◆ Records Research
- ◆ Schedule / Delay Analysis
- ◆ Entitlement Analysis
- ◆ Risk Analysis

REA & CLAIMS AVOIDANCE / RESOLUTION

- Program Management System promotes good documentation necessary for review/resolution of disputes
 - Schedules
 - Documents
 - Issues
 - Risks



REA & CLAIMS AVOIDANCE / RESOLUTION

- Integration of documentation into a centralized storehouse
 - Issues/Risks/Documents correlated to specific construction activities
 - Documentation kept current in single place
 - Contemporaneous information
 - Searchable database

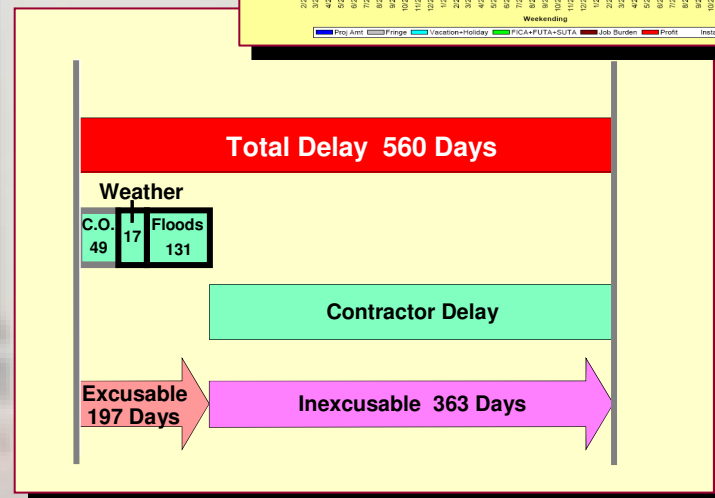
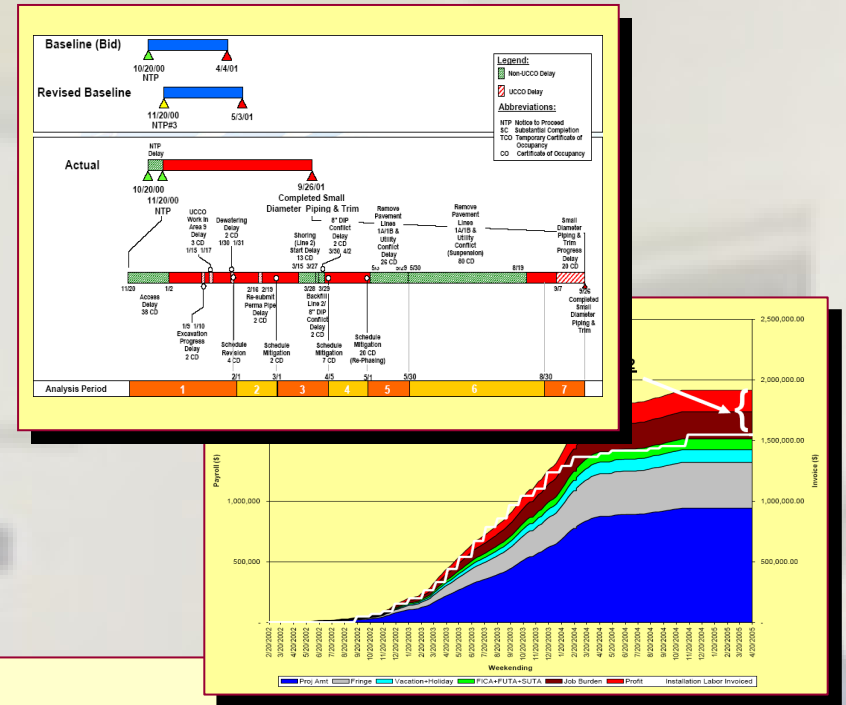
REA & CLAIMS AVOIDANCE / RESOLUTION

ISSUES HANDLED

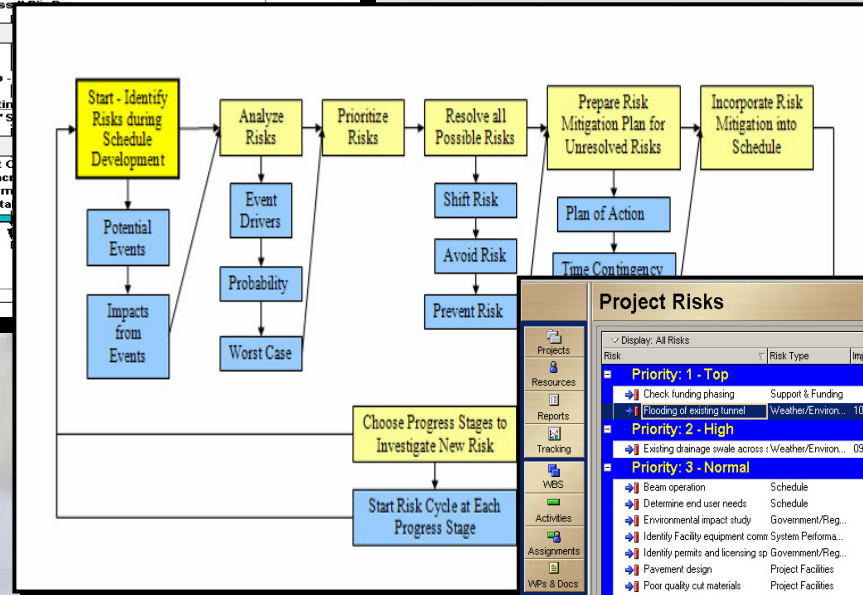
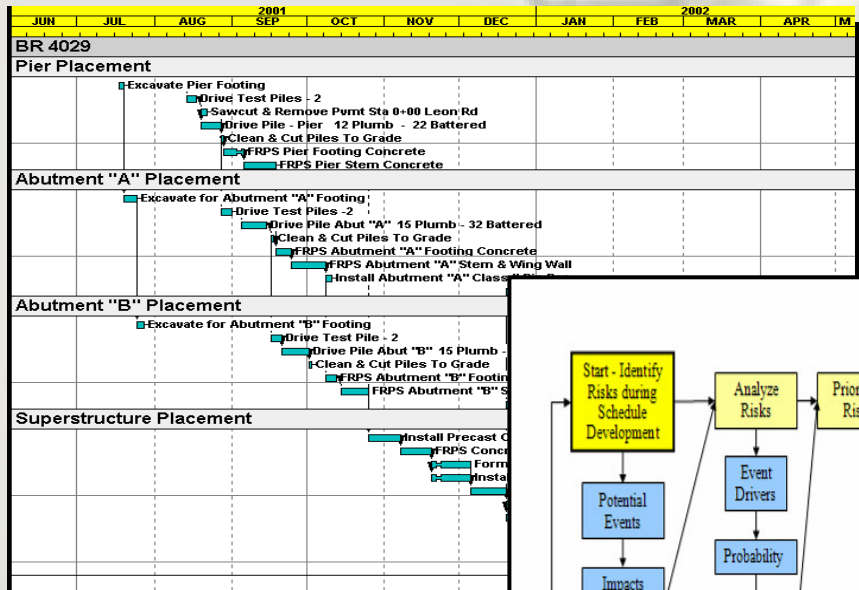
- ◆ Differing Site Conditions
- ◆ Changed Conditions
- ◆ Change in SOW or Design Program
- ◆ Design Errors, Failure to Meet Specs
- ◆ Loss of Productivity
- ◆ Project Delays

RESOLUTION METHODS

- ◆ Negotiation Strategy
- ◆ Construction Resequencing
- ◆ Design Alternatives
- ◆ Impact Analysis / Risk Assessment



Integrated Schedule / Risk Management Approach



Project Risks

Display: All Risks

Risk	Risk Type	Impact Date	WBS	Status	Priority	ted Activities
Priority: 1 - Top						
Check funding phasing	Support & Funding		JLAHAllD	Open	1 - Top	36
Flooding of existing tunnel	Weather/Environ...	10-08-07	JLAHAllD	Open	1 - Top	0
Priority: 2 - High						
Existing drainage swale across : Weather/Environ... 09-13-07 JLAHAllD Open 2 - High 0						
Priority: 3 - Normal						
Beam operation	Schedule		JLAHAllD	Open	3 - Normal	36
Determine end user needs	Schedule		JLAHAllD	Open	3 - Normal	36
Environmental impact study	Government/Reg...		JLAHAllD	Open	3 - Normal	36
Identify Facility equipment comr	System Performa...		JLAHAllD	Open	3 - Normal	36
Identify permits and licensing sp	Government/Reg...		JLAHAllD	Open	3 - Normal	36
Pavement design	Project Facilities		JLAHAllD	Open	3 - Normal	36
Poor quality cut materials	Project Facilities		JLAHAllD	Open	3 - Normal	36
Potential Wetlands	Weather/Environ...		JLAHAllD	Open	3 - Normal	36

General | Description | Impact | Control

Risk Control Plan

Identify specific closure design for existing tunnel.

Design dewatering system for draw-down below bottom of existing tunnel.

Determine length of time necessary for dewatering.

- ◆ **Baseline / Progress Schedules**
- ◆ **Claims Avoidance Planning**
- ◆ **Time Impact / Delay Analysis**
- ◆ **Claims Resolution**

Lessons Learned

Lessons Learned from Design Build Construction of Surgical Centers:

- ◆ Remember, Owners rarely understand DB
- ◆ Hold early Design Build training session
- ◆ Hold periodic meetings to reinforce DB
- ◆ Formal program development team
 - ◆ Medical administrator
 - ◆ Medical specialists - Surgery & Anesthesia
 - ◆ Primary nurse staff
 - ◆ Interior designer (usually provided by MD)
 - ◆ Equipment supplier
 - ◆ Accreditation peer reviewer
- ◆ Design development feedback crucial

Lessons Learned

Lessons Learned from Design Build Construction of Surgical Centers:

- ◆ Get involved in accreditation standards early
- ◆ Include maintenance portion of accreditation
- ◆ Visit peer reviewer's surgical suite if possible
- ◆ Plan expansion for additional physicians
- ◆ Budgeting feedback more important than DBB
- ◆ Program should include serious discussion about all other potential services (hair transplants, skin care, non-surgical services)
- ◆ Weekly constructability reviews
- ◆ Program team approves plans only, no submittal review (review only for compliance)

Lessons Learned

Lessons Learned from Design Build Construction of Surgical Centers:

- ◆ **Projects are successful only if the competing goals of the Stakeholders are met**
 - ◆ **Surgeon Stakeholder – Quality & Design**
 - ◆ **Medical Administrator – Cost & Time**
- ◆ **Design Build requires timely communication**
- ◆ **Partnering is the most effective means**
 - ◆ **A Program provides the framework**
 - ◆ **Open & real time communications vital**
- ◆ **Enterprise Program Management provides a reliable way to learn from these lessons**

Summary

Design Build Construction of Surgical Centers is best served by:

- ◆ **Initiation of a Program approach**
- ◆ **Partnering throughout the construction**
- ◆ **A system that allows real-time resolution of all issues**
- ◆ **Enterprise Program Management is the best solution**
- ◆ **Primavera Enterprise system provides the right processes and tools for success**
- ◆ **Properly done, all goals can be met in every project**

Design-Build Surgical Center Program Management

Questions?

Chris Carson, PSP

Alpha Corporation

Norfolk, Virginia

DBIA and COAA present

HealthCare 2007

2007 DBIA/COAA HealthCare Project Delivery Conference
December 9-11, 2007 | Houston, TX

PREPARING
TODAY FOR
HEALTHCARE
FACILITIES
OF THE
FUTURE