Appendix-9

Road Slope Management System (RSMS)

Mannual Volume 5

List of Visual Basic Files

Ver1.0 June 2007

The Department of Public Works and Highways

| Filename | Description |
|--------------------|--|
| frmAbout.frm | Form for About RSMS |
| frmAbout.frx | Visual Basic Form Binary File |
| frmAdd New.frm | Form for adding new inventory survey |
| frmAdd New.frx | Visual Basic Form Binary File |
| frmAddDel User.frm | Form for adding/deleting user accounts |
| frmAddDel User.frx | Visual Basic Form Binary File |
| frmAdmin_Op.frm | Form for Administrative Option menu |
| frmAdmin Op.frx | Visual Basic Form Binary File |
| frmChange Pas.frm | Form for Changing Password |
| frmChange Pas.frx | Visual Basic Form Binary File |
| frmChangeForm.frm | Form for Changing Formula |
| frmChangeForm.frx | Visual Basic Form Binary File |
| frmData Brow.frm | Form for Data Browser |
| frmData Brow.frx | Visual Basic Form Binary File |
| frmData Man.frm | Form for Data Manipulation |
| frmData Man.frx | Visual Basic Form Binary File |
| frmDelete Data.frm | Form for Delete Data |
| frmDelete Data.frx | Visual Basic Form Binary File |
| frmForgotPass.frm | Form for Forgot Password |
| frmForgotPass.frx | Visual Basic Form Binary File |
| frmGrantRevoke.frm | Form for Grant/Revoke Privilege |
| frmGrantRevoke.frx | Visual Basic Form Binary File |
| frmImport_Data.frm | Form for Import Data |
| frmImport Data.frx | Visual Basic Form Binary File |
| frmMain_Menu.frm | Form for Main Menu |
| frmMain_Menu.frx | Visual Basic Form Binary File |
| frmModify_Data.frm | Form for Modify Data |
| frmModify_Data.frx | Visual Basic Form Binary File |
| frmQuery.frm | Form for Select Query |
| frmQuery.frx | Visual Basic Form Binary File |
| frmRemove_UnRe.frm | Form for Remove/Un-remove Data |
| frmRemove_UnRe.frx | Visual Basic Form Binary File |
| frmReset_Pas.frm | Form for Reset Password |
| frmReset_Pas.frx | Visual Basic Form Binary File |
| frmShut_Start.frm | Form for Shutdown/Start Server |
| frmShut_Start.frx | Visual Basic Form Binary File |
| frmSplash.frm | Form for Splash screen |
| frmSplash.frx | Visual Basic Form Binary File |
| frmUser_Login.frm | Form for User Login |
| frmUser_Login.frx | Visual Basic Form Binary File |
| modRSMS.bas | Modules for RSMS |
| Module1.bas | Modules for RSMS |
| RSMS.vbp | RSMS Visual Basic Project |
| RSMS.vbw | RSMS Visual Basic Project Workspace |

Appendix-10

Road Slope Management System (RSMS)

Manual Volume 6

List of Database Tables and Columns

Ver1.0 June 1 2007

The Department of Public Works and Highways

1)Tb_Constant

| Column | Name Data Typ | e Length | Allow Null |
|-------------------|---------------|----------|------------|
| Coeff_Vol_Max | nvarchar | 50 | Υ |
| Coeff_Vol_NoInput | nvarchar | 50 | Υ |
| Coeff_Vol_Ave | nvarchar | 50 | Y |
| Ave_Human_Death | nvarchar | 50 | Υ |
| Unit_Value_Human | nvarchar | 50 | |
| CM1_Min | nvarchar | 50 | Y |
| CM1_Ave | nvarchar | 50 | Y |
| CM1_Max | nvarchar | 50 | Y |
| CM2_Min | nvarchar | 50 | Y |
| CM2_Ave | nvarchar | 50 | Υ |
| CM2_Max | nvarchar | 50 | Y |
| CM3_Min | nvarchar | 50 | Y |
| CM3_Ave | nvarchar | 50 | Y |
| CM3_Max | nvarchar | 50 | Υ |

2)Tb_Disas_Type

| | Column Name | Data Type | Length | Allow Null |
|---------|---------------|-----------|--------|------------|
| MainKey | Disaster_Code | nchar | 2 | N |
| | Disaster_Name | char | 30 | N |

3)Tb_FRCDp_CE

| Column Name | Data Type | Length | Allow Null |
|-------------------|-----------|--------|------------|
| Factor_Categories | nvarchar | 100 | Υ |
| Frequency_Score | nvarchar | 50 | Υ |
| Factor_Items | nvarchar | 100 | Y |

4)Tb_FRCDp_DF

| Column Name | Data Type | Length | Allow Null |
|-------------------|-----------|--------|------------|
| Factor_Categories | nvarchar | 50 | Υ |
| Frequency_Score | nvarchar | 50 | Y |
| Factor_Items | nvarchar | 50 | Y |

5)Tb_FRCDp_LS

| Column Name | Data Type | Length | Allow Null |
|-------------------|-----------|--------|------------|
| Factor_Categories | nvarchar | 50 | Υ |
| Frequency_Score | nvarchar | 50 | Υ |
| Factor_Items | nvarchar | 50 | Υ |

6)Tb_FRCDp_RC

| Column Name | Data Type | Length | Allow Null |
|-------------------|-----------|--------|------------|
| Factor_Categories | nvarchar | 50 | Υ |
| Frequency_Score | nvarchar | 50 | Y |
| Factor_Items | nvarchar | 50 | Y |

7)Tb_FRCDp_RE

| Column Name | Data Type | Length | Allow Null |
|-------------------|-----------|--------|------------|
| Factor_Categories | nvarchar | 50 | Υ |
| Frequency_Score | nvarchar | 50 | Y |
| Factor Items | nvarchar | 100 | Υ |

8)Tb_FRCDp_RS

| Column Name | Data Type | Length | Allow Null |
|-------------------|-----------|--------|------------|
| Factor_Categories | nvarchar | 50 | Υ |
| Frequency_Score | nvarchar | 50 | Y |
| Factor_Items | nvarchar | 50 | Y |

9)Tb_FRCDp_SC

| Column Name | Data Type | Length | Allow Null |
|-------------------|-----------|--------|------------|
| Factor_Categories | nvarchar | 50 | Υ |
| Frequency_Score | nvarchar | 50 | Υ |
| | nvarchar | 50 | Υ |

10)Tb_KmPost

| Column Name | Data Type | Length | Allow Null |
|------------------|-----------|--------|------------|
| RoadSection_Code | nvarchar | 50 | N |
| Kilometer_Code | nvarchar | 50 | Y |
| Kilometer_Start | nvarchar | 50 | Y |

11)Tb_Office

| | Column Name | Data Type | Length | Allow Null |
|---------|-------------|-----------|--------|------------|
| MainKey | Office_Name | nvarchar | 50 | N |
| | Region_Name | nvarchar | 50 | Υ |

12)Tb_Region

| | Column Name | Data Type | Length | Allow Null |
|---------|-------------|-----------|--------|------------|
| MainKey | Region_Name | nvarchar | 50 | N |

13)Tb_Road

| Column Name | Data Type | Length | Allow Null |
|----------------|-----------|--------|------------|
| Road_Code | nvarchar | 50 | N |
| Road_Name | nvarchar | 50 | Υ |
| Office_Name | nvarchar | 50 | Y |
| Classification | nvarchar | 50 | Υ |

14)Tb_RoadSection

| | Column Name | Data Type | Length | Allow Null |
|---------|------------------|-----------|--------|------------|
| MainKey | RoadSection_Code | nvarchar | 50 | N |
| | Section_Length | nvarchar | 50 | Y |
| | Road Code | nvarchar | 50 | Y |

15)Tb_Survey_Pt_Account

| | Column Name | Data Type | Length | Allow Null |
|---------|-------------|-----------|--------|------------|
| MainKey | Username | nvarchar | 50 | N |
| | Password | ntext | 16 | Y |
| | Question | nvarchar | 100 | Υ |
| | Answer | nvarchar | 50 | Υ |
| | Privilege | char | 10 | Υ |
| | Туре | nvarchar | 50 | Y |

16)Tb_Survey_Pt_CE

| | Column Name | Data Type | Length | Allow Null |
|---------|---------------------------------------|-----------|--------|------------|
| MainKey | SurveyPointID | nchar | 30 | N |
| | CE_Len_Survey | nvarchar | 50 | Y |
| | CE_Dist_from_Coast | nvarchar | 50 | Y |
| | CE_Level_High_Water | nvarchar | 50 | Y |
| | CE_Material_Coastal_Bank | nvarchar | 50 | Υ |
| | CE_Material_Coast | nvarchar | 50 | Υ |
| | CE_Collapse_Revetment | nvarchar | 50 | Υ |
| | CE_Erosion_Revetment | nvarchar | 50 | Υ |
| | CE_Erosion_Coastal_Side | nvarchar | 50 | Υ |
| | CE_Cracks_Crevices | nvarchar | 50 | Y |
| | CE_Depression | nvarchar | 50 | Υ |
| | CE_Exist_Revetment_with_foundation | nvarchar | 50 | Υ |
| | CE_Exist_Revetment_without_Foundation | nvarchar | 50 | Y |
| | CE_Exist_Wave_Absorb_Work | nvarchar | 50 | Υ |
| | CE_Exist_Other | nvarchar | 50 | Υ |
| | CE_Name_Countermeasure | nvarchar | 50 | Y |
| | CE_Length_RCD | float | 8 | Y |
| | CE_DS_Unit_Reopen_Cost | float | 8 | Υ |
| | CE_DS_Fixed_Reopen | float | 8 | Υ |
| | Annual_Reopen_Cost | float | 8 | Y |
| | CE_DS_Ave_Human_Loss | float | 8 | Y |
| | CE_DS_Est_Human_Life | float | 8 | Υ |
| | Annual Human Loss | float | 8 | Y |

17)Tb_Survey_Pt_DF

| | Column Name | Data Type | Length | Allow Null |
|---------|----------------------------|-----------|--------|------------|
| MainKey | SurveyPointID | nchar | 30 | N |
| | DF_Width_Channel | nvarchar | 50 | Υ |
| | DF_Drainage_Area | nvarchar | 50 | Y |
| | DF_Height_From_Channel | nvarchar | 50 | Υ |
| | DF_Vegetation | nvarchar | 50 | Y |
| | DF_Material_Sediment | nvarchar | 50 | Y |
| | DF_Slope_Failure_Situation | nvarchar | 50 | Y |
| | DF_Trace_of_Debris | nvarchar | 50 | Y |
| | DF_Exist_Small_Check_Dam | nvarchar | 50 | Y |
| | DF_Exist_Sabo_Dam | nvarchar | 50 | Y |
| | DF_Exist_Other | nvarchar | 50 | Y |
| | DF_Name_Countermeasure | nvarchar | 50 | Y |
| | DF_Length_RCD | float | 8 | Y |
| | DF_DS_Unit_Reopen_Cost | float | 8 | Y |
| | DF_DS_Fixed_Reopen | float | 8 | Y |
| | Annual_Reopen_Cost | float | 8 | Y |
| | DF_DS_Ave_Human_Loss | float | 8 | Y |
| | DF_DS_Est_Human_Life | float | 8 | Y |
| | Annual_Human_Loss | float | 8 | Y |

18)Tb_Survey_Pt_LS

| | Column Name | Data Type | Length | Allow Null |
|---------|---------------------------|-----------|--------|------------|
| MainKey | SurveyPointID | nchar | 30 | N |
| | LS_Len_Survey | nvarchar | 20 | Y |
| | LS_Slope_Gradient | nvarchar | 50 | Υ |
| | LS_Slope_Shape | nvarchar | 50 | Υ |
| | LS_Vegetation | nvarchar | 50 | Y |
| | LS_Material_Surface | nvarchar | 50 | Υ |
| | LS_Spring_Surf_Water | nvarchar | 50 | Y |
| | LS_Erosion | nvarchar | 50 | Υ |
| | LS_Piping_Hole | nvarchar | 50 | Y |
| | LS_Collapse_Slump | nvarchar | 50 | Υ |
| | LS_Crack_Crevice | nvarchar | 50 | Y |
| | LS_Fallen_Inclined_Tree | nvarchar | 50 | Y |
| | LS_Depression_Upheaval | nvarchar | 50 | Y |
| | LS_Exist_Slope_Road_Drain | nvarchar | 50 | Y |
| | LS_Exist_Dewatering | nvarchar | 50 | Y |
| | LS_Exist_Cut_Work | nvarchar | 50 | Y |
| | LS_Exist_Embankment | nvarchar | 50 | Y |
| | LS_Exist_Catch_Wall | nvarchar | 50 | Y |
| | LS_Exist_Other | nvarchar | 50 | Y |
| | LS_Name_Countermeasure | nvarchar | 50 | Y |
| | LS_Length_RCD | float | 8 | Υ |
| | LS_DS_Unit_Reopen_Cost | float | 8 | Y |
| | LS_DS_Fixed_Reopen | float | 8 | Y |
| | Annual_Reopen_Cost | float | 8 | Υ |
| | LS_DS_Ave_Human_Loss | float | 8 | Y |
| | LS_DS_Est_Human_Life | float | 8 | Y |
| | Annual_Human_Loss | float | 8 | Y |

19)Tb_Survey_Pt_RC

| | Column Name | Data Type | Length | Allow Null |
|---------|--------------------------------|-----------|--------|------------|
| MainKey | SurveyPointID | nchar | 30 | N |
| | RF_Len_Survey | nvarchar | 50 | Υ |
| | RF_Height_Slope | nvarchar | 50 | Y |
| | RF_Slope_Gradient | nvarchar | 50 | Y |
| | RF_Dist_from_Road | nvarchar | 50 | Y |
| | RF_Slope_Shape | nvarchar | 50 | Y |
| | RF_Vegetation | nvarchar | 50 | Y |
| | RF_Material_Surface | nvarchar | 50 | Y |
| | RF_Spring_Surf_Water | nvarchar | 50 | Υ |
| | RF_Fall | nvarchar | 50 | Y |
| | RF_Open_Crack_Overhang | nvarchar | 50 | Υ |
| | RF_Toppling | nvarchar | 50 | Y |
| | RF_Cross_Open_Crack | nvarchar | 50 | Y |
| | RF_Slide_Direction_Open_Crack | nvarchar | 50 | Y |
| | RF_Exist_Guard_Fence | nvarchar | 50 | Y |
| | RF_Exist_Catch_Concrete_Gabion | nvarchar | 50 | Y |
| | RF_Exist_Shotcrete | nvarchar | 50 | Y |
| | RF_Exist_Rock_Shed | nvarchar | 50 | Y |
| | RF_Exist_Other | nvarchar | 50 | Υ |
| | RF_Name_Countermeasure | nvarchar | 50 | Y |
| | RF_DS_Coeff_Volume | nvarchar | 30 | Y |
| | RF_DS_Collapse_length | float | 8 | Υ |
| | RF_DS_Collapse_width | float | 8 | Υ |
| | RF_DS_Collapse_depth | float | 8 | Υ |
| | RF_DS_Collapse_volume | float | 8 | Y |
| | RF_DS_Ratio_accum_collapse | float | 8 | Y |
| | RF_DS_Accum_Volume | float | 8 | Y |
| | RF_DS_Unit_Reopen_Cost | float | 8 | Υ |
| | RF_DS_Fixed_Reopen | float | 8 | Y |
| | Annual_Reopen_Cost | float | 8 | Υ |
| | RF_DS_Ave_Human | float | 8 | Υ |
| | RF_DS_Est_Human | float | 8 | Υ |
| | Annual_Human_Loss | float | 8 | Υ |

20)Tb_Survey_Pt_RE

| | Column Name | Data Type | Length | Allow Null |
|---------|------------------------|-----------|--------|------------|
| MainKey | SurveyPointID | nchar | 30 | N |
| | RE_Len_Survey | nvarchar | 50 | Υ |
| | RE_Dist_from_Low_Water | nvarchar | 50 | Υ |
| | RE_Width_River | nvarchar | 50 | Υ |
| | RE_Level_High_Water | nvarchar | 50 | Υ |
| | RE_Material_River_Bank | nvarchar | 50 | Υ |
| | RE_Material_River_Bead | nvarchar | 50 | Υ |
| | RE_Crack_Crevice | nvarchar | 50 | Υ |
| | RE_Depression | nvarchar | 50 | Υ |
| | RE_Fall_Slump | nvarchar | 50 | Υ |
| | RE_Exist_Revertment | nvarchar | 50 | Υ |
| | RE_Exist_Groin_Spur | nvarchar | 50 | Υ |
| | RE_Exist_Other | nvarchar | 50 | Y |
| | RE_Name_Countermeasure | nvarchar | 50 | Υ |
| | RE_Length_RCD | float | 8 | Υ |
| | RE_DS_Unit_Reopen_Cost | float | 8 | Υ |
| | RE_DS_Fixed_Reopen | float | 8 | Y |
| | Annual_Reopen_Cost | float | 8 | Υ |
| | RE_DS_Ave_Human_Loss | float | 8 | Υ |
| | RE_DS_Est_Human_Life | float | 8 | Y |
| | Annual_Human_Loss | float | 8 | Υ |

21)Tb_Survey_Pt_RS

| | Column Name | Data Type | Length | Allow Null |
|---------|-------------------------|-----------|--------|------------|
| MainKey | SurveyPointID | nchar | 30 | N |
| | RS_Len_Survey | nvarchar | 50 | Y |
| | RS_Height_Slope | nvarchar | 50 | Υ |
| | RS_Slope_Gradient | nvarchar | 50 | Y |
| | RS_Distance_Slope | nvarchar | 50 | Y |
| | RS_Slope_Shape | nvarchar | 50 | Y |
| | RS_Vegetation | nvarchar | 50 | Υ |
| | RS_Slope_Type | nvarchar | 50 | Y |
| | RS_Material_Surface | nvarchar | 50 | Υ |
| | RS_Spring_Surf_Water | nvarchar | 50 | Y |
| | RS_Rain_Water | nvarchar | 50 | Y |
| | RS_Erosion | nvarchar | 50 | Y |
| | RS_Piping_Hole | nvarchar | 50 | Υ |
| | RS_Crack_Crevice | nvarchar | 50 | Y |
| | RS_Depression | nvarchar | 50 | Υ |
| | RS_Fall_Slump | nvarchar | 50 | Υ |
| | RS_Exist_Road_Drain | nvarchar | 50 | Y |
| | RS_Exist_Retaining_Wall | nvarchar | 50 | Υ |
| | RS_Other | nvarchar | 50 | Y |
| | RS_Name_Countermeasure | nvarchar | 50 | Υ |
| | RS_Length_RCD | float | 8 | Υ |
| | RS_DS_Unit_Reopen_Cost | float | 8 | Y |
| | RS DS Fixed Reopen | float | 8 | Y |
| | Annual_Reopen_Cost | float | 8 | Y |
| | RS_DS_Ave_Human_Loss | float | 8 | Y |
| | RS_DS_Est_Human_Life | float | 8 | Υ |
| | Annual_Human_Loss | float | 8 | Y |

22)Tb_Survey_Pt_SC

| | Column Name | Data Type | Length | Allow Null |
|---------|--------------------------------|-----------|--------|------------|
| MainKey | SurveyPointID | nchar | 30 | N |
| | SC_Len_Survey | nvarchar | 50 | Υ |
| | SC_Height_Slope | nvarchar | 50 | Υ |
| | SC_Slope_Gradient | nvarchar | 50 | Y |
| | SC_Dist_from_Road | nvarchar | 50 | Υ |
| | SC_Slope_Shape | nvarchar | 50 | Υ |
| | SC_Vegetation | nvarchar | 50 | Y |
| | SC_Material_Surface | nvarchar | 50 | Υ |
| | SC_Area_Ratio_Bedrock | nvarchar | 50 | Y |
| | SC_Materials_Bedrock | nvarchar | 50 | Υ |
| | SC_Spring_Surf_Water | nvarchar | 50 | Y |
| | SC_Erosion | nvarchar | 50 | Y |
| | SC_Piping_Hole | nvarchar | 50 | Y |
| | SC_Collapse_Slump | nvarchar | 50 | Y |
| | SC_Crack_Crevice | nvarchar | 50 | Y |
| | SC_Fallen_Inclined_Tree | nvarchar | 50 | Y |
| | SC_Depression_Bulge | nvarchar | 50 | Y |
| | SC_Exist_Guard_Fence | nvarchar | 50 | Y |
| | SC_Exist_Catch_Concrete_Gabion | nvarchar | 50 | Y |
| | SC_Exist_Slope_Drain | nvarchar | 50 | Y |
| | SC_Exist_Shotcrete | nvarchar | 50 | Υ |
| | SC_Exist_Retaining_Wall | nvarchar | 50 | Y |
| | SC_Exist_Vegetation | nvarchar | 50 | Υ |
| | SC_Exist_Other | nvarchar | 50 | Υ |
| | SC_Name_Countermeasure | nvarchar | 50 | Y |
| | SC_DS_Coeff_Volume | nvarchar | 30 | Y |
| | SC_DS_Collapse_length | float | 8 | Υ |
| | SC_DS_Collapse_width | float | 8 | Y |
| | SC_DS_Collapse_depth | float | 8 | Υ |
| | SC_DS_Collapse_volume | float | 8 | Υ |
| | SC_DS_Ratio_accum_collapse | float | 8 | Υ |
| | SC DS Accum Volume | float | 8 | Y |
| | SC_DS_Unit_Reopen_Cost | float | 8 | Υ |
| | SC DS Fixed Reopen | float | 8 | Y |
| | Annual_Reopen_Cost | float | 8 | Υ |
| | SC_DS_Ave_Human | float | 8 | Y |
| | SC_DS_Value_Human | float | 8 | Y |
| | Annual_Human_Loss | float | 8 | Υ |

23)Tb_Survey_Pt

| | Column Name | Data Type | Length | Allow Null |
|---------|-------------------------|-----------|--------|------------|
| MainKey | SurveyPointID | nchar | 30 | N |
| | Remove_Flag | char | 10 | Υ |
| | ExcelFile_Name | nvarchar | 300 | Y |
| | Region_Name | nvarchar | 50 | Y |
| | Office_in_Charge | nvarchar | 50 | Υ |
| | Route_Name | nvarchar | 50 | Y |
| | RoadID | nvarchar | 50 | Y |
| | RoadSectionID | nvarchar | 50 | Υ |
| | KPost1 | nvarchar | 50 | Y |
| | Start_m | nvarchar | 50 | Y |
| | KPost2 | nvarchar | 50 | Y |
| | End m | nvarchar | 50 | Y |
| | Survey_length | nvarchar | 50 | Y |
| | Side_of_Survey | nvarchar | 50 | Y |
| | Disaster Type | nchar | 2 | Ý |
| | Prepared_By | nvarchar | 50 | Ý |
| | Prepared Date | nvarchar | 50 | Ý |
| | Checked By | nvarchar | 50 | Y |
| | Checked Date | nvarchar | 50 | Ý |
| | No RCD | nvarchar | 50 | Ý |
| | Period Disaster DB | nvarchar | 53 | Y |
| | FRCD a | nvarchar | 53 | Y |
| | No RCD bc | nvarchar | 53 | Y |
| | | | 53 | Y |
| | Period_Disaster_Db_bc | nvarchar | | |
| | FRCD_a_bc | nvarchar | 53 | Y |
| | Visible_Disturbance | nvarchar | 50 | Y |
| | FRCD_p_no_CM | nvarchar | 53 | Y |
| | FRCD_p | nvarchar | 53 | Y |
| | Evaluation_Necessity | nvarchar | 50 | Y |
| | Detailed_Survey_Flag | nvarchar | 50 | Y |
| | DetSurvey_Prepared_By | nvarchar | 50 | Y |
| | DetSurvey_Prepared_Date | nvarchar | 50 | Υ |
| | DetSurvey_Checked_By | nvarchar | 50 | Y |
| | DetSurvey_Checked_Date | nvarchar | 50 | Y |
| | CM1_Work1 | nvarchar | 50 | Υ |
| | CM1_Unit1 | nvarchar | 50 | Y |
| | CM1_Quantity1 | nvarchar | 50 | Y |
| | CM1_UnitPrice1 | nvarchar | 50 | Y |
| | CM1_Amount1 | nvarchar | 50 | Y |
| | CM1_Work2 | nvarchar | 50 | Υ |
| | CM1_Unit2 | nvarchar | 50 | Y |
| | CM1_Quantity2 | nvarchar | 50 | Y |
| | CM1_UnitPrice2 | nvarchar | 50 | Y |
| | CM1_Amount2 | nvarchar | 50 | Y |
| | CM1_Work3 | nvarchar | 50 | Υ |
| | CM1_Unit3 | nvarchar | 50 | Y |
| | CM1_Quantity3 | nvarchar | 50 | Y |
| | CM1_UnitPrice3 | nvarchar | 50 | Ý |
| | CM1 Amount3 | nvarchar | 50 | Ý |
| | CM1 Work4 | nvarchar | 50 | Ý |
| | CM1 Unit4 | nvarchar | 50 | Ý |
| | CM1_Quantity4 | nvarchar | 50 | Ý |
| | OWT_Quantity4 | rivarchar | 90 | T |

| Column Name | Data Type | Length | Allow Null |
|---|---------------|--------|------------|
| CM3_Work1 | nvarchar | 50 | Υ |
| CM3_Unit1 | nvarchar | 50 | Y |
| CM3_Quantity1 | nvarchar | 50 | Y |
| CM3_UnitPrice1 | nvarchar | 50 | Y |
| CM3_Amount1 | nvarchar | 50 | Y |
| CM3_Work2 | nvarchar | 50 | Y |
| CM3_Unit2 | nvarchar | 50 | Υ |
| CM3 Quantity2 | nvarchar | 50 | Y |
| CM3_UnitPrice2 | nvarchar | 50 | Y |
| CM3_Amount2 | nvarchar | 50 | Y |
| CM3_Work3 | nvarchar | 50 | Y |
| CM3 Unit3 | nvarchar | 50 | Y |
| CM3 Quantity3 | nvarchar | 50 | Y |
| CM3 UnitPrice3 | nvarchar | 50 | Y |
| CM3_Amount3 | nvarchar | 50 | Y |
| CM3 Work4 | nvarchar | 50 | Y |
| GM3_Unit4 | nvarchar | 50 | Y |
| CM3 Quantity4 | nvarchar | 50 | Y |
| CM3 UnitPrice4 | nvarchar | 50 | Y |
| CM3 Amount4 | nvarchar | 50 | Y |
| CM3 Work5 | nvarchar | 50 | Y |
| CM3 Unit5 | nvarchar | 50 | Ý |
| CM3 Quantity5 | nvarchar | 50 | Ý |
| CM3 UnitPrice5 | nvarchar | 50 | Ý |
| CM3 Amount5 | nvarchar | 50 | Ý |
| CM3 Work6 | nvarchar | 50 | Ý |
| CM3 Unit6 | nvarchar | 50 | Ý |
| CM3_Quantity6 | nvarchar | 50 | Ý |
| CM3 UnitPrice6 | nvarchar | 50 | Ϋ́ |
| CM3 Amount6 | nvarchar | 50 | Ý |
| CM3 Work7 | nvarchar | 50 | Ý |
| CM3 Unit7 | nvarchar | 50 | Ý |
| CM3 Quantity7 | nvarchar | 50 | Ý |
| CM3 UnitPrice7 | nvarchar | 50 | Ý |
| CM3 Amount7 | nvarchar | 50 | Ý |
| Len_Survey_Road | nvarchar | 53 | Ý |
| Len Detour Road | nvarchar | 53 | Ÿ |
| AADT | nvarchar | 53 | Ÿ |
| Road_Closure_Days | nvarchar | 53 | Ý |
| Ave_Vehicle_Oper_Cost1 | nvarchar | 53 | Ÿ |
| Ave_Vehicle_Oper_Cost2 | nvarchar | 53 | Ý |
| Annual Detour Loss | nvarchar | 53 | Ÿ |
| Total Annual Loss | float. | 8 | Y |
| Plan 1 Cost | nvarchar | 53 | Ý |
| Plan 1 Disas Reduc Ratio | nvarchar | 53 | Ý |
| Plan_1_Annual_Benefit | nvarchar | 53 | Ÿ |
| Plan_1_FRCDp | nvarchar | 53 | Y |
| Plan 1 Cost Benefit Ratio | nvarchar | 53 | Ý |
| Plan_1_Cost_Benefit_Natio | nvarchar | 53 | Y |
| Plan_1_Economic_Rate | nvarchar | 53 | Y |
| Plan_2_Cost | i i var Griar | 55 | - ' |
| Plan_2_Oost Plan_2_Disas_Reduc_Ratio | nvarchar | 53 | Y |
| rian_z_bisas_Reduc_Ratio | rivarchar | 53 | 1 |

23)Tb_Survey_Pt(continued)

| | Column Name | Data Type | Length | Allow Null |
|---------------|---|----------------------|--------|------------|
| | CM3_Work1 | nvarchar | 50 | Υ |
| | CM3_Unit1 | nvarchar | 50 | Y |
| | CM3_Quantity1 | nvarchar | 50 | Y |
| | CM3_UnitPrice1 | nvarchar | 50 | Y |
| | CM3 Amount1 | nvarchar | 50 | Y |
| | CM3 Work2 | nvarchar | 50 | Y |
| | CM3 Unit2 | nvarchar | 50 | Y |
| | CM3 Quantity2 | nvarchar | 50 | Y |
| | CM3 UnitPrice2 | nvarchar | 50 | Y |
| | CM3 Amount2 | nvarchar | 50 | Y |
| | CM3 Work3 | nvarchar | 50 | Y |
| | CM3 Unit3 | nvarchar | 50 | Y |
| | CM3_Quantity3 | nvarchar | 50 | Y |
| | CM3 UnitPrice3 | nvarchar | 50 | Y |
| | CM3 Amount3 | nvarchar | 50 | Y |
| | CM3 Work4 | nvarchar | 50 | Y |
| | CM3 Unit4 | nvarchar | 50 | Ý |
| | CM3 Quantity4 | nvarchar | 50 | Ý |
| | CM3 UnitPrice4 | nvarchar | 50 | Ý |
| | CM3 Amount4 | nvarchar | 50 | Ý |
| | CM3 Work5 | nvarchar | 50 | Ý |
| | GM3 Unit5 | nvarchar | 50 | Ý |
| | CM3 Quantity5 | nvarchar | 50 | Ý |
| | CM3 UnitPrice5 | nvarchar | 50 | Ý |
| | CM3 Amount5 | nvarchar | 50 | Ý |
| | CM3 Work6 | nvarchar | 50 | Ý |
| | CM3 Unit6 | nvarchar | 50 | Ý |
| | CM3_Quantity6 | nvarchar | 50 | Ý |
| | CM3 UnitPrice6 | nvarchar | 50 | Y |
| | CM3 Amount6 | nvarchar | 50 | Ý |
| | CM3 Work7 | nvarchar | 50 | Y |
| | CM3 Unit7 | nvarchar | 50 | Y |
| | CM3 Quantity7 | nvarchar | 50 | Ý |
| | CM3 UnitPrice7 | nvarchar | 50 | Y |
| | CM3 Amount7 | nvarchar | 50 | Y |
| | Len Survey Road | nvarchar | 53 | Y |
| | Len Detour Road | nvarchar | 53 | Y |
| | AADT | nvarchar | 53 | Y |
| \vdash | Road_Closure_Days | nvarchar nvarchar | 53 | Y |
| | Ave_Vehicle_Oper_Cost1 | nvarchar nvarchar | 53 | Y |
| | Ave_Vehicle_Oper_Cost1 Ave_Vehicle_Oper_Cost2 | nvarchar nvarchar | 53 | Y |
| | Annual Detour Loss | nvarchar | 53 | Y |
| | Total Annual Loss | nvarcnar float | 8 | Y |
| | Plan 1 Cost | nvarchar | 53 | Y |
| | Plan_1_Cost Plan_1_Disas_Reduc_Ratio | nvarchar nvarchar | 53 | Y |
| | Plan_1_Disas_Reduc_Ratio Plan_1_Annual_Benefit | | 53 | Y |
| | | nvarchar | | |
| | Plan_1_FRCDp | nvarchar | 53 | Y |
| | Plan_1_Cost_Benefit_Ratio | nvarchar | 53 | Y |
| | Plan_1_Economic_Net | nvarchar | 53 | Y |
| | Plan_1_Economic_Rate | nvarchar | 53 | Y |
| | Plan_2_Cost | | | |
| $\overline{}$ | Plan_2_Disas_Reduc_Ratio | nvarchar | 53 | Y |

23)Tb_Survey_Pt(continued)

| Column Name | Data Type | Length | Allow Null |
|---------------------------|-----------|--------|------------|
| Plan_2_Annual_Benefit | nvarchar | 53 | Υ |
| Plan_2_FRCDp | nvarchar | 53 | Y |
| Plan_2_Cost_Benefit_Ratio | nvarchar | 53 | Y |
| Plan 2 Economic Net | nvarchar | 53 | Υ |
| Plan_2 Economic_Rate | nvarchar | 53 | Y |
| Plan 3 Cost | nvarchar | 53 | Y |
| Plan_3_Disas_Reduc_Ratio | nvarchar | 53 | Y |
| Plan 3 Annual Benefit | nvarchar | 53 | Y |
| Plan_3_FRCDp | nvarchar | 53 | Ý |
| Plan_3_Cost_Benefit_Ratio | nvarchar | 53 | Y |
| Plan_3_Economic_Net | nvarchar | 53 | Y |
| Plan 3 Economic Rate | nvarchar | 53 | Y |
| Inspected By | nvarchar | 50 | Ϋ́ |
| Survey Date | nvarchar | 50 | Ý |
| Disas Occur Hr | nvarchar | 50 | Ý |
| Disas Occur Date | nvarchar | 50 | Ý |
| Disas_Type | nvarchar | 50 | Ý |
| Reopen Hr | nvarchar | 50 | Y |
| Reopen Date | nvarchar | 50 | Y |
| No_Days_RCD | nvarchar | 53 | Y |
| | | 53 | Y |
| Disas_Station_frm_km | nvarchar | 53 | Y |
| Disas_Station_frm_m | nvarchar | ,,,,,, | |
| Disas_Station_to_km | nvarchar | 53 | Y |
| Disas_Station_to_m | nvarchar | 53 | Y |
| Disas_Len | numeric | 9 | Y |
| Road_Closure_Type | nvarchar | 50 | Y |
| Disas_Cause | nvarchar | 50 | Y |
| Collapse_Materials | nvarchar | 50 | Y |
| Collapse_Volume | nvarchar | 53 | Υ |
| Accum_Vol | nvarchar | 53 | Y |
| Total_Reopen_Cost_Est | numeric | 9 | Y |
| Total_Reopen_Cost_Act | numeric | 9 | Υ |
| Reopen_Method | nvarchar | 50 | Y |
| No_Persons_Died | nvarchar | 50 | Y |
| No_Persons_Injured | nvarchar | 50 | Y |
| Name_CM1 | nvarchar | 50 | Υ |
| Station_Km1 | nvarchar | 50 | Y |
| Station_M1 | nvarchar | 50 | Y |
| Until_Km1 | nvarchar | 50 | Y |
| Until_M1 | nvarchar | 50 | Y |
| Name_CM2 | nvarchar | 50 | Y |
| Station_Km2 | nvarchar | 50 | Y |
| Station_M2 | nvarchar | 50 | Υ |
| Until_Km2 | nvarchar | 50 | Y |
| Until_M2 | nvarchar | 50 | Y |
| Name CM3 | nvarchar | 50 | Y |
| Station Km3 | nvarchar | 50 | Y |
| Station M3 | nvarchar | 50 | Ý |
| Until Km3 | nvarchar | 50 | Ý |
| Until M3 | nvarchar | 50 | Ý |
| Name CM4 | nvarchar | 50 | Y |
| Station Km4 | nvarchar | 50 | Y |
| otation_nm4 | rivarenar | 50 | -1 |

23)Tb_Survey_Pt(continued)

| Colu | mn Name | Data Type | Length | Allow Null |
|--------------|---------|-----------|--------|------------|
| Station_M4 | | nvarchar | 50 | Υ |
| Until_Km4 | | nvarchar | 50 | Y |
| Until_M4 | | nvarchar | 50 | Y |
| Name_CM5 | | nvarchar | 50 | Y |
| Station_Km5 | | nvarchar | 50 | Y |
| Station_M5 | | nvarchar | 50 | Y |
| Until_Km5 | | nvarchar | 50 | Y |
| Until_M5 | | nvarchar | 50 | Y |
| Name_CM6 | | nvarchar | 50 | Y |
| Station_Km6 | | nvarchar | 50 | Y |
| Station_M6 | | nvarchar | 50 | Y |
| Until_Km6 | | nvarchar | 50 | Y |
| Until_M6 | | nvarchar | 50 | Y |
| Rehab_Plan | | nvarchar | 50 | Y |
| Outline_Plan | | nvarchar | 50 | Y |
| Year_Created | | nvarchar | 50 | Y |
| GISFlag | | bit | 1 | Y |

Appendix-11

Road Slope Management System (RSMS)

Manual Volume 7

Schematic Diagram

of

Database Tables

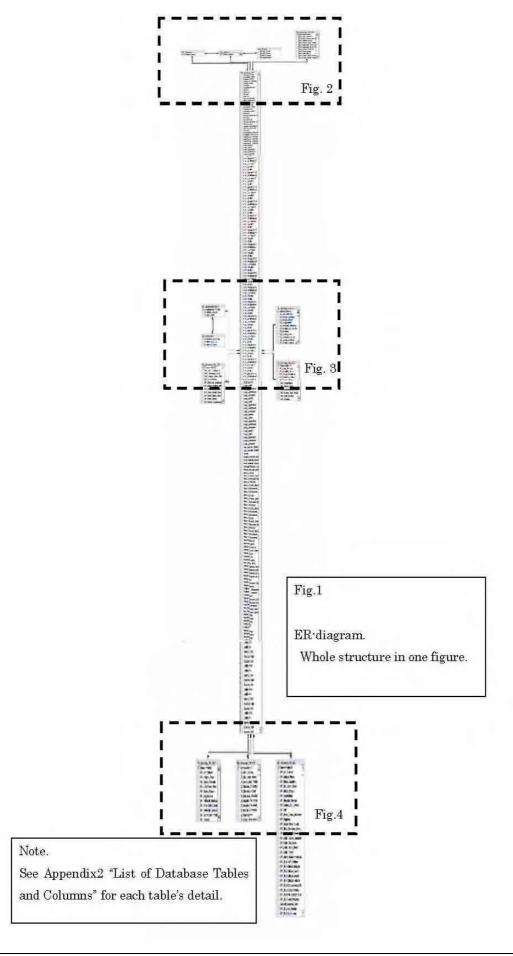
Ver1.0 June 2007

The Department of Public Works and Highways

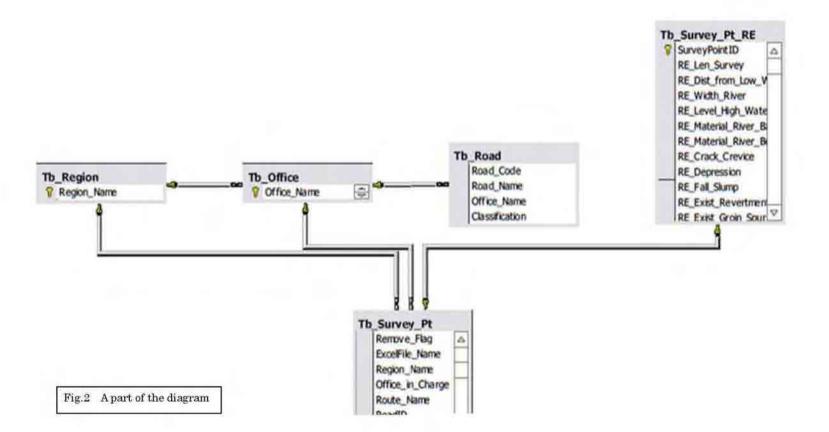
Note

The purpose of this appendix is to provide the users who are engaged in the administrative work for RSMS system with an overview of relationships between database tables.

In the following figures, the details of each database tables are hard to read. For details of database tables and their columns, please refer to Manual Volume 5 "List of Database Tables and Columns"

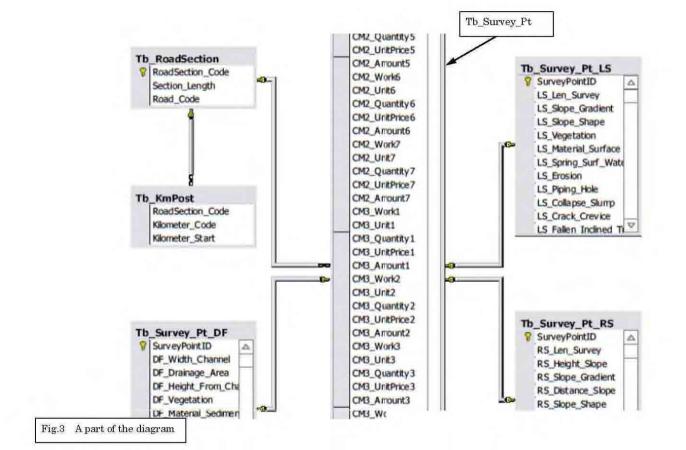


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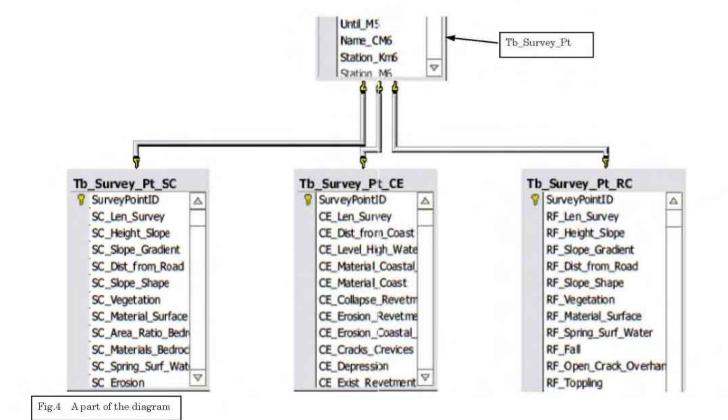
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