***Coding Standard QA audit conducted based on document titled “SQL Coding Standards Dec09-2020” dowloaded from in Github.***

**Naming Test 1: Review all column and table names in database and confirm compliance with naming convention**

“VoteCounts” table name is pluralized. Per Coding standard 2.2 the table should be named “VoteCount”

In CandidateType table, columns named “Incumbent” and “Acclaimed” not in compliance with rule 2.2 that column names should be plural

**Naming Test 2: Review all reference column names in database and confirm compliance with naming convention**

CommunityID missing FK7 (has FK1 to FK6 and FK8)

VotingStationTypeIDs has PK and FK1 but no FK

VotingStationIDs has PK, FK2 and FK3 but no FK, FK1

CandidateIDs has PK, FK1 and FK2 but no FK

NewWardIDs has PK, FK, FK1, FK2 and FK3

**Naming Test 3: Review all join tables and view names in database and confirm compliance with naming convention**

2 join tables found are in compliance with naming convention. No views found in code

**Naming Test 4: Review all stored procedures in database and confirm compliance with naming convention**

No special procedure found in code

**Naming Test 5: Review all indexes in database and confirm compliance with naming convention**

No index found in code

**~~Naming Test 6: Review all defaults in database and confirm compliance with naming convention~~**

**Coding Test 1: Review all comments in database and confirm compliance with comment format**

All comments enclosed in “- -“ and in compliance

**Coding Test 2: Check that all SQL keywords in database code are typed in uppercase**

Code line 217: “identity” needs to be uppercase

**Coding Test 3: Check that all statements in database code are closed with a “;” (semicolon)**

Checked, ok.

**Coding Test 3.1: Check that each attribute name is placed on a separate line when there are multiple attributes listed in the statement**

Checked, ok.

**Coding Test 4: Check that all “SELECT” queries in database code specify column and table names and do not use the “\*” syntax**

Checked, ok. (but SELECT \* is present in comment section of code)

**Coding Test 5: Check that all temporary result sets in database code are in the common table expression format using “cte”**

No common table expressions found in code

**Coding Test 6: Check that all UPDATE and DELETE queries in database code include a WHERE condition**

Checked, ok.

**Coding Test 7: Check that each separate query starts on a new line.**

Checked, ok.

**Coding Test 8: Surround the equals “=” operator with spaces**

Multiple lines of code are non-compliant (no space added before the “=” operator)

**Coding Test 9: Check that all JOIN queries in database code include the column name and abbreviated table name**

Checked, ok.

**Coding Test 10: Check use of parentheses with complicated expressions to improve code readability**

Checked, ok.

**Coding Test 11: Check that all INSERT queries in database code include column name**

Line 284 – 287 not compliant

**Coding Test 12: Check that all ORDER BY queries are followed by ASC or DESC**

Line 199 not compliant

**Coding Test 13: Security- Use BEGIN TRAN, COMMIT/ROLLBACK with all UPDATE, DELETE, DROP, TRUNCATE queries.**

Lines 6-52 not compliant

**Coding Test 14: Confirm that datatype character lengths and other attributes are defined for optimal storage**

Code not compliant. Most of the columns do not have data type set in code.