

Appendix C

VAHBS CAD Drawings

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Introduction

The following CAD drawings have been developed to assist in communicating VAHBS concepts to the project team. They are intended as a guide to the type of information that the A/E should incorporate in the construction documents in order to communicate the VAHBS concept and strategies to the Contractor.

The drawings have been prepared in accordance with VHA [National CAD Standard Application Guide](#). The Design A/E shall make revisions for construction type, dimensions, geometries, service systems; and any other project specific requirements if any portions of these drawing files are to be included in the construction document package.

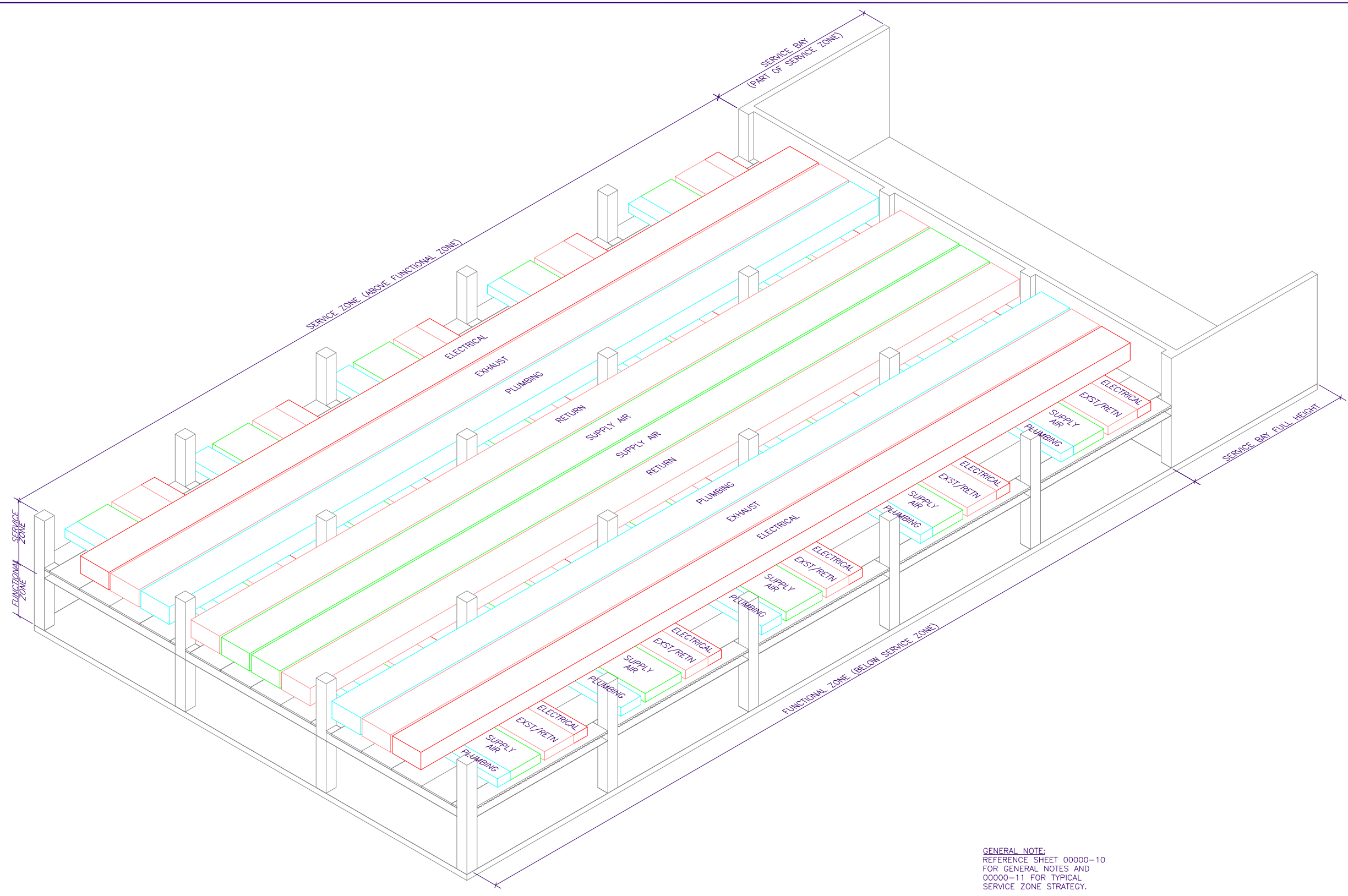
Note that the drawing numbering begins with 00000-5 for the typical service module and channel diagrams and notes. These drawings have been numbered to continue the sequence for VA architectural standard details in section 00000. VA standard details are generally numbered by specification section or division. 00000 is used for details that relate to multiple disciplines or do not otherwise fit in a single section.

The interstitial floor system (deck) details are numbered to relate to Master Specification Section 03522, INSULATING CONCRETE INTERSTITIAL DECK.

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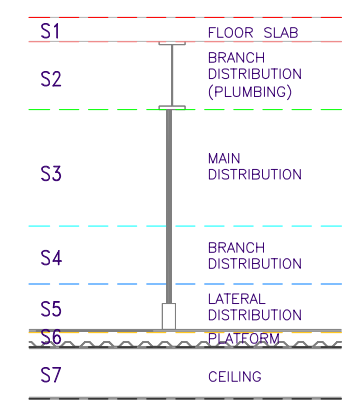
DRAWING INTENT

1. TO SHOW THE OVERALL RELATIONSHIP OF THE SUBSYSTEM CHANNELS IN THE S3 AND S4 SUBZONES.
2. EACH CHANNEL IS DEPICTED GRAPHICALLY BY A 3D SOLID.
3. THE SOLIDS SHOW THE TOTAL VOLUME AVAILABLE FOR DISTRIBUTION WITHIN THE CHANNEL.
4. THE TOTAL VOLUME WILL NOT NECESSARILY BE FULLY UTILIZED.
5. EACH CHANNEL IS RESERVED FOR A SINGLE SERVICE.
6. SERVICES WILL NOT MIGRATE TO OTHER CHANNELS.
7. SEE FOLLOWING SHEETS FOR INDIVIDUAL SUBSYSTEMS.



GENERAL NOTE:
 REFERENCE SHEET 00000-10
 FOR GENERAL NOTES AND
 00000-11 FOR TYPICAL
 SERVICE ZONE STRATEGY.

1 TYPICAL CHANNEL LAYOUT - ALL SYSTEMS S3 AND S4 SUBZONES
 NTS



SERVICE ZONE KEY
 NTS

one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 three eighths inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot

Revisions	Date

CONSULTANTS:

ARCHITECT/ENGINEERS:

Drawing Title
**SERVICE MODULES
 TYPICAL CHANNEL LAYOUT
 ALL SYSTEMS S3 AND S4 SUBZONES**

Approved Project Director

Project Title
**SUPPLEMENT TO
 VAHBS REPORT**

Location
STANDARD DETAIL

Date
JUNE 2006

Checked
NCK

Drawn
JLV

Project Number
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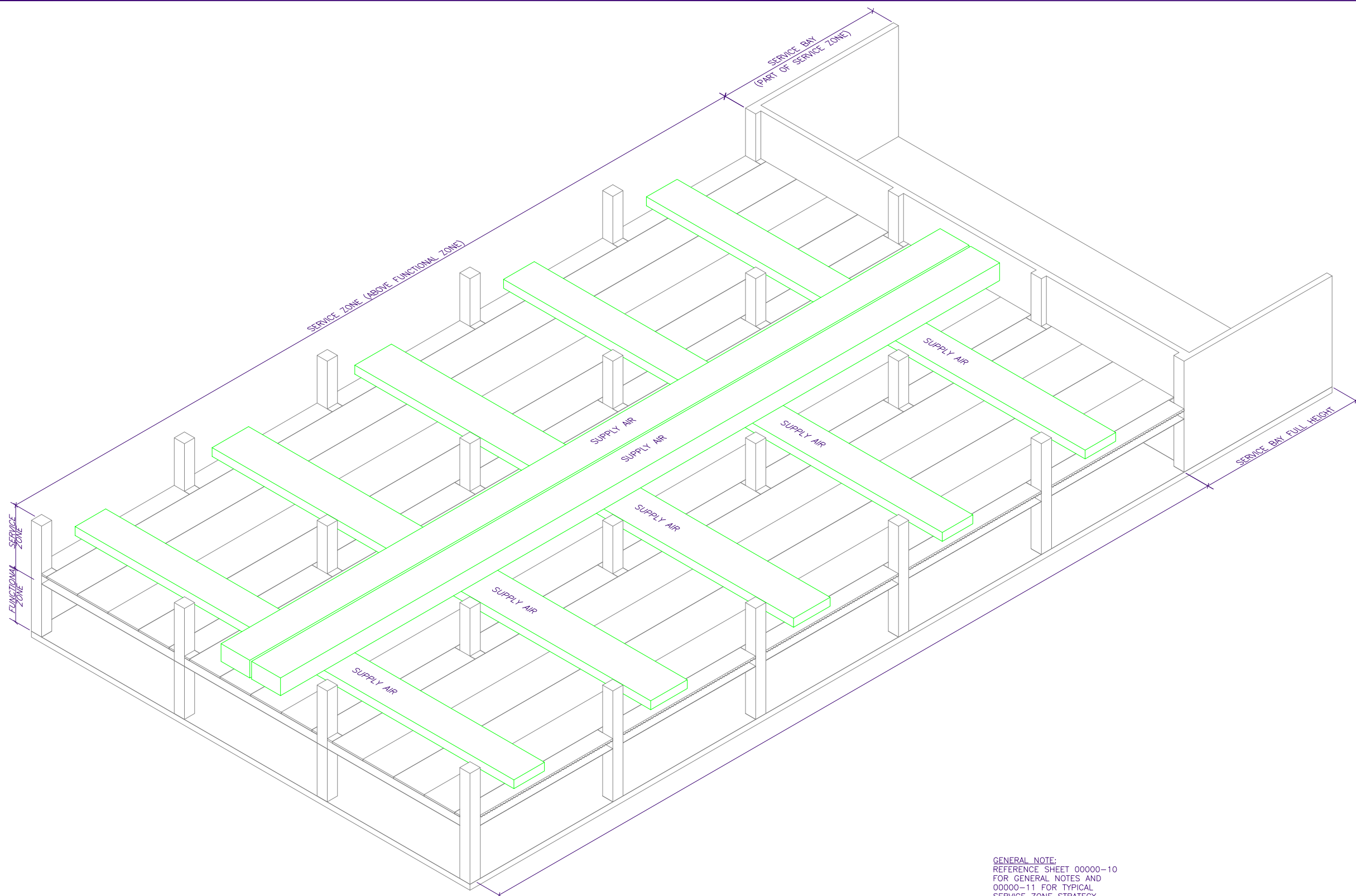
Building Number
VAHBS

Drawing Number
00000-5
 Dwg. of -

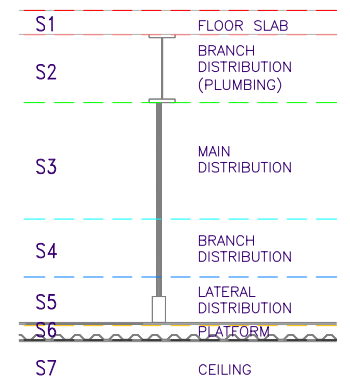


DRAWING INTENT

1. TO SHOW THE RELATIONSHIP OF THE HVAC SUPPLY AIR SUBSYSTEM CHANNELS IN THE S3 AND S4 SUBZONES.
2. THESE CHANNELS ARE DEPICTED GRAPHICALLY BY A 3D SOLID.
3. THE SOLIDS SHOW THE TOTAL VOLUME AVAILABLE FOR DISTRIBUTION WITHIN THE CHANNEL.
4. THE TOTAL VOLUME WILL NOT NECESSARILY BE FULLY UTILIZED.
5. THESE CHANNELS ARE RESERVED FOR HVAC SUPPLY AIR SUBSYSTEM ONLY.
6. SERVICES WILL NOT MIGRATE TO OTHER CHANNELS.



GENERAL NOTE:
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 FOR GENERAL NOTES AND
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SERVICE ZONE KEY

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Revisions	Date

CONSULTANTS:

ARCHITECT/ENGINEERS:

Drawing Title
SERVICE MODULE - TYPICAL CHANEL LAYOUT - HVAC SUPPLY AIR SYSTEMS S3 AND S4 SUBZONES

Approved Project Director

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Building Number
VAHBS

Drawing Number
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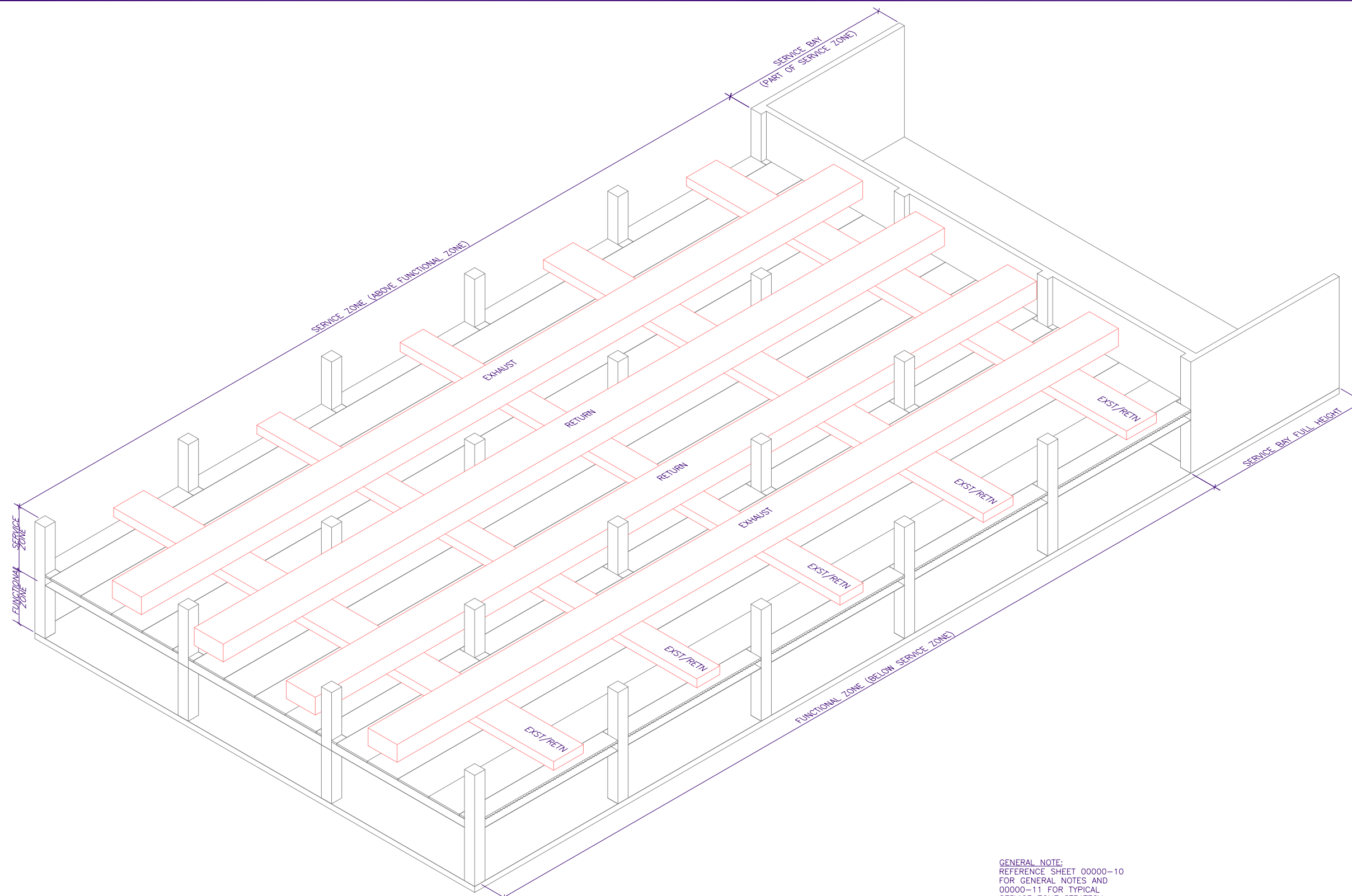
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Department of Veterans Affairs

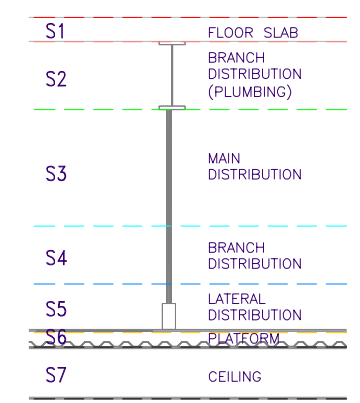
DRAWING INTENT

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ARCHITECT/ENGINEERS:

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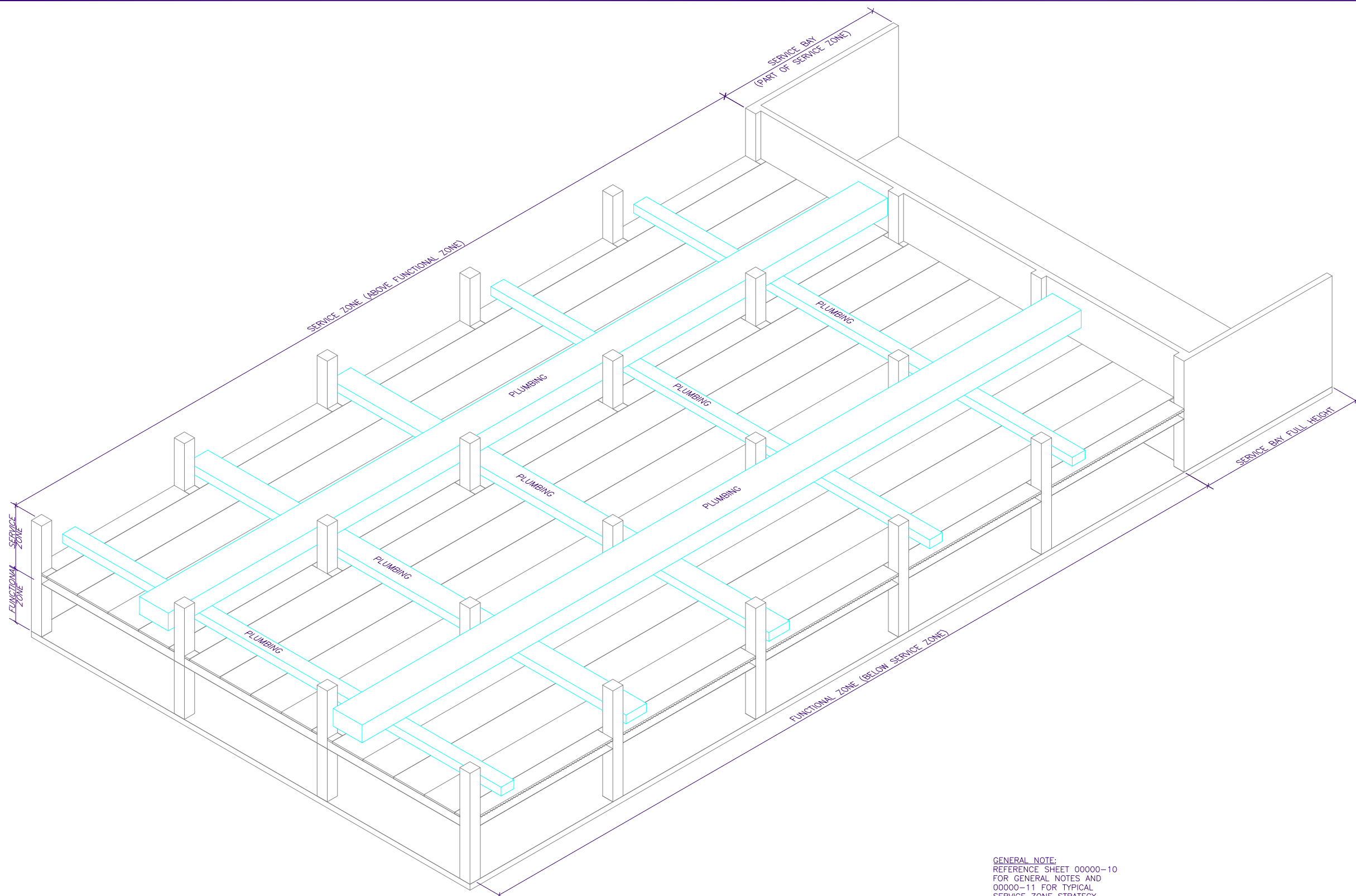
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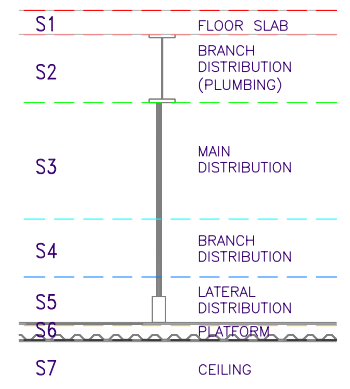
Department of Veterans Affairs

DRAWING INTENT

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GENERAL NOTE:
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 00000-11 FOR TYPICAL
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SERVICE ZONE KEY
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1 TYPICAL CHANNEL LAYOUT - PLUMBING SYSTEMS S3 AND S4 SUBZONES
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Revisions	Date

CONSULTANTS:

ARCHITECT/ENGINEERS:

Drawing Title
**SERVICE MODULE
 TYPICAL CHANNEL LAYOUT - PLUMBING
 SYSTEMS S3 AND S4 SUBZONES**

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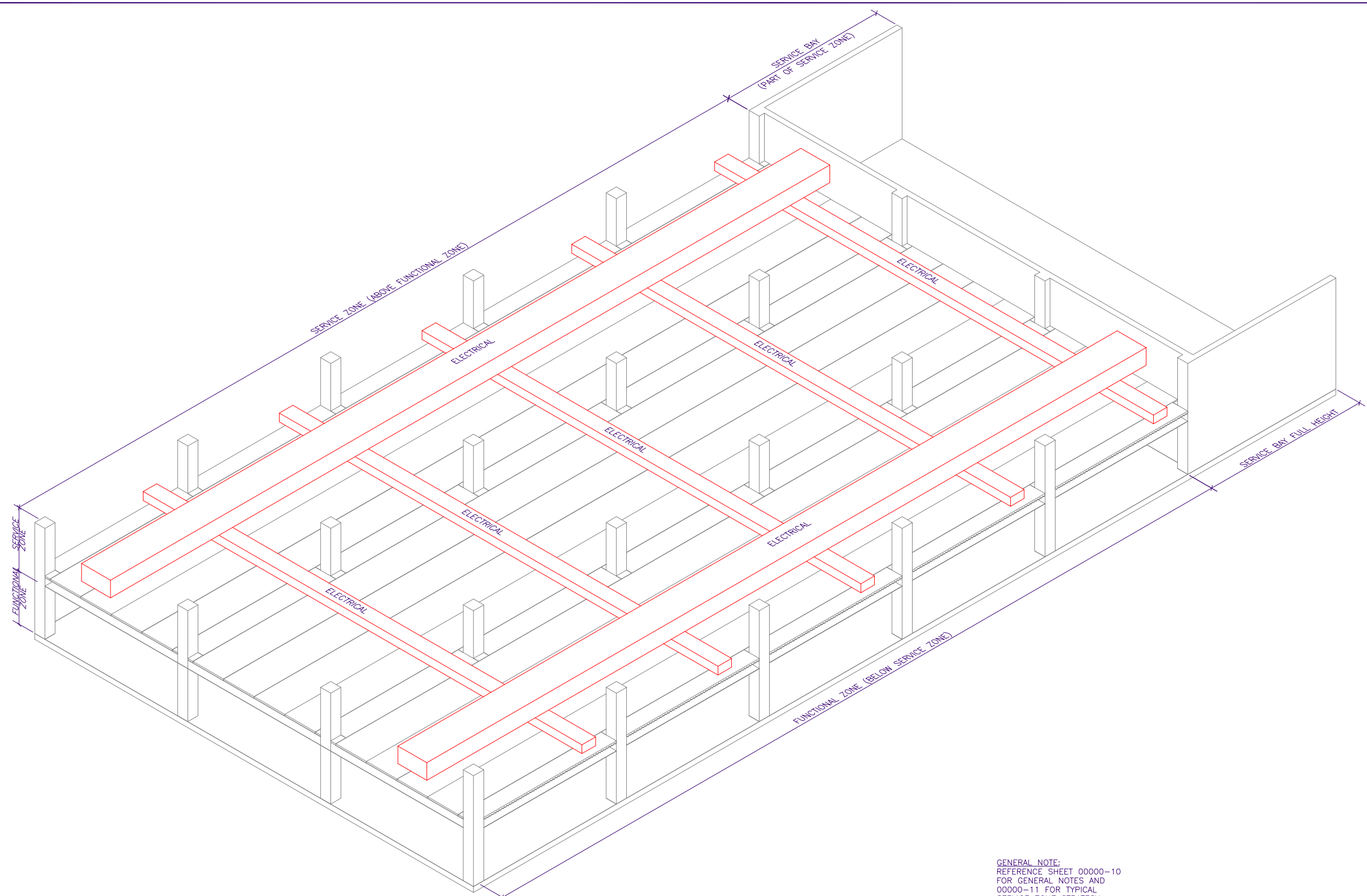
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 Management**

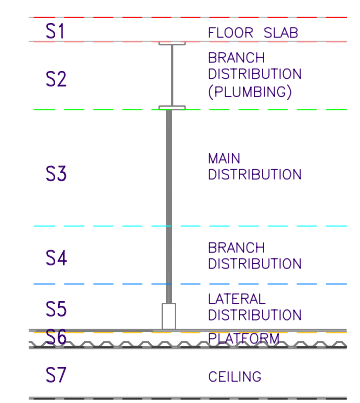
Department of
 Veterans Affairs

DRAWING INTENT

1. TO SHOW THE RELATIONSHIP OF THE ELECTRICAL SUBSYSTEM CHANNELS IN THE S3 AND S4 SUBZONES.
2. THESE CHANNELS ARE DEPICTED GRAPHICALLY BY A 3D SOLID.
3. THE SOLIDS SHOW THE TOTAL VOLUME AVAILABLE FOR DISTRIBUTION WITHIN THE CHANNEL.
4. THE TOTAL VOLUME WILL NOT NECESSARILY BE FULLY UTILIZED.
5. THESE CHANNELS ARE RESERVED FOR HVAC SUPPLY AIR SUBSYSTEM ONLY.
6. SERVICES WILL NOT MIGRATE TO OTHER CHANNELS.



GENERAL NOTE:
 REFERENCE SHEET 00000-10
 FOR GENERAL NOTES AND
 00000-11 FOR TYPICAL
 SERVICE ZONE STRATEGY.



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CONSULTANTS:

ARCHITECT/ENGINEERS:

Drawing Title
SERVICE MODULE - TYPICAL CHANNEL LAYOUT - ELECTRICAL SYSTEMS S3 AND S4 SUBZONES

Approved Project Director

Project Title
SUPPLEMENT TO VAHBS REPORT

Location
STANDARD DETAIL

Date
JUNE 2006

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Project Number
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Building Number
VAHBS

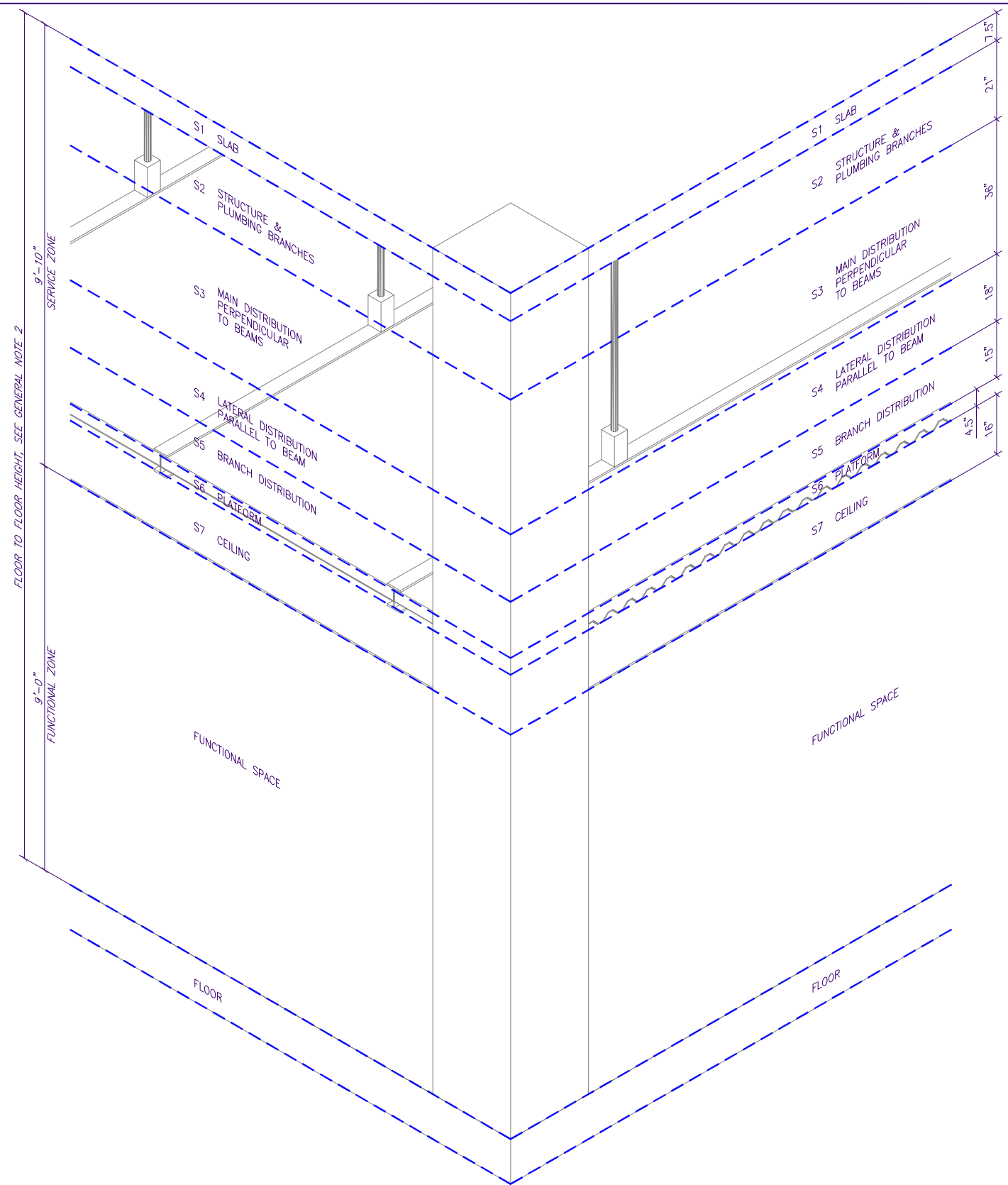
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Office of Facilities Management

Department of Veterans Affairs

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DRAWING INTENT:
 THIS IS AN ISOMETRIC OF
 A PORTION OF A TYPICAL
 OF A TYPICAL SERVICE
 MODULE SHOWING SERVICE
 AND FUNCTIONAL ZONES.

GENERAL NOTES

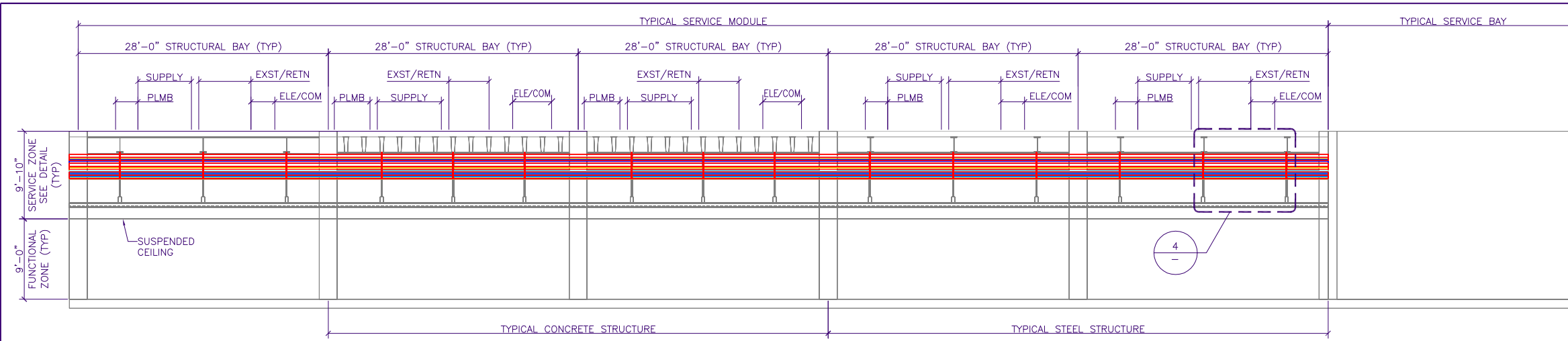
- SERVICE MODULE**
 A SERVICE MODULE IS THE BASIC ORGANIZATIONAL UNIT FOR PLANNING AND SERVICE DISTRIBUTION IN THE VA HOSPITAL BUILDING SYSTEM. SERVICE MODULES ARE ONE STORY UNITS OF BUILDING VOLUME. EACH SERVICE MODULE IS COMPRISED OF STRUCTURAL BAYS, FUNCTIONAL ZONE (THE OCCUPIED AREAS) AND A SERVICE ZONE THAT INCLUDES A FULL HEIGHT SERVICE BAY AND AN INTERSTITIAL SERVICE ZONE ABOVE THE FUNCTIONAL ZONE. EACH SERVICE MODULE IS COMPLETELY CONTAINED, ALONE OR WITH ONE OR MORE OTHER MODULES, IN A FIRE COMPARTMENT IN THE BUILDING.
- STRUCTURAL BAY**
 THE DIMENSIONS OF THE STRUCTURAL BAY ARE INFLUENCED BY THE FUNCTIONAL LAYOUT (SPACE PLANNING), SERVICE ZONE CLEARANCES, AND TYPE OF STRUCTURAL SYSTEM SELECTED. SERVICE MODULES FOR DIFFERENT FUNCTIONAL AREAS MAY VARY IN FLOOR HEIGHT. HOWEVER, ALL MODULES WITHIN ANY ONE STORY SHALL BE OF THE SAME HEIGHT. CEILING HEIGHTS SHALL BE AS PROVIDED IN PG-18-10 ARCHITECTURAL DESIGN MANUAL. HEIGHT OF INTERSTITIAL SERVICE ZONE MAY VARY ABOVE FUNCTIONAL ZONES FOR SURGERY AND RADIOLOGY. HEADROOM CLEARANCES SHALL COMPLY WITH APPLICABLE REGULATIONS.
- SERVICE ZONE - SERVICE BAY**
 THE SERVICE BAY IS A SPECIAL VARIATION OF STRUCTURAL BAY THAT CONTAINS THE MECHANICAL, ELECTRICAL, AND TELECOMMUNICATIONS ROOMS; AND SERVICE SHAFTS AND RISERS (AND MAY INCLUDE EXIT STAIRS) FOR A SERVICE MODULE. MAJOR EQUIPMENT ITEMS AND ALL PUMPS AND MOTORS ARE CONTAINED IN THE SERVICE BAY. IN SECTION, THE SERVICE BAY EXTENDS FROM STRUCTURAL FLOOR TO STRUCTURAL FLOOR. THE WALK-ON PLATFORM (INTERSTITIAL DECK) DOES NOT EXTEND INTO OR THROUGH THE SERVICE BAY.
- SERVICE ZONE - INTERSTITIAL**
 THE INTERSTITIAL PORTION OF THE SERVICE ZONE PROVIDES FOR THE ORGANIZED DISTRIBUTION OF SERVICES FROM THE SERVICE BAY TO THE FUNCTIONAL ZONE. A HIERARCHY OF RESERVED SUBZONES AND CHANNELS IS DEFINED FOR SERVICE DISTRIBUTION AND INCLUDES PROVISIONS FOR MAINTENANCE ACCESS AND FUTURE MODIFICATIONS. REFER TO DRAWING 00000-11 FOR TYPICAL SERVICE ZONE STRATEGY.
- FUNCTIONAL ZONES AND SPACE MODULES**
 THE FUNCTIONAL ZONE IS THE OCCUPIED FLOOR AREA WITHIN A SERVICE MODULE. SPACE MODULES ARE VARIATIONS OF THE SERVICE MODULE DESIGNED FOR INPATIENT BED UNITS. SPACE MODULES MAY BE THE SAME SIZE OR SMALLER THAN A SERVICE MODULE, BUT IN NO CASE MAY BE LARGER THAN A SERVICE MODULE.
- FIRE COMPARTMENT**
 THE FIRE COMPARTMENT IS A UNIT OF AREA ENCLOSED BY TWO-HOUR FIRE RESISTIVE RATED CONSTRUCTION, FROM WHICH THERE ARE AT LEAST TWO DIFFERENT EXITS. THE SIZE AND NUMBER OF FIRE COMPARTMENTS SHALL BE AS DETERMINED BY CURRENT CODES AND THE OVERALL FIRE PROTECTION STRATEGY FOR THE BUILDING.
 A FIRE COMPARTMENT MAY CONSIST OF ONE OR MORE SERVICE MODULES. THE BOUNDARIES OF THE FIRE COMPARTMENT SHOULD COINCIDE WITH THE BOUNDARIES OF THE SERVICE MODULE. A SERVICE MODULE SHALL NOT POPULATE MORE THAN ONE FIRE COMPARTMENT.
- REFER TO DRAWING 00000-12 FOR FIRE RESISTANCE REQUIREMENTS AT PENETRATIONS AND OPENINGS AT INTERSTITIAL AREAS.

INTERSTITIAL DISTRIB. SUPPORT STRATEGY

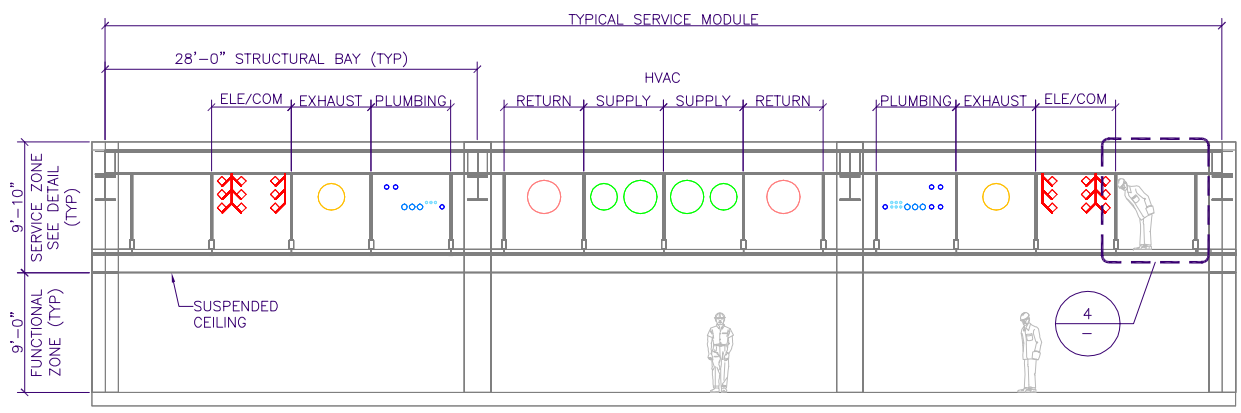
SUBZONE	STRATEGY
S1	FLOOR THICKNESS INCLUDES 3" TOPPING SLAB TO ALLOW FOR INSTALLATION OF CERAMIC TILE, WATER PROOFING, SHOWER PANS, AND RECESSED EQUIPMENT. REFERENCE PG-18-3 TOPIC 6.
S2	SERVICE SYSTEM ELEMENTS IN THE S2 ZONE, SHALL BE SUSPENDED FROM THE UNDERSIDE OF THE FLOOR SLAB OR DECK.
S3	SERVICE SYSTEM ELEMENTS IN THE S3 ZONE SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE UNDERSIDE OF THE STRUCTURAL BEAMS. SUPPORTS SHALL BE SECURED TO THE BOTTOM OF THE BEAMS. SYSTEMS IN THIS ZONE ALSO MAY BE SUSPENDED FROM THE UNDERSIDE OF THE DECK. HOWEVER, USE OF THE DECK FOR SUPPORT SHOULD BE MINIMIZED.
S4	SERVICE SYSTEM ELEMENTS IN THE S4 ZONE SHALL BE SUPPORTED FROM THE PLATFORM PURLIN.
S5	SERVICE SYSTEM ELEMENTS IN THE S5 ZONE SHALL BE SUPPORTED FROM THE PLATFORM.
S7	SERVICE SYSTEM ELEMENTS IN THE S7 ZONE AS WELL AS FINISH CEILINGS SHALL BE SUSPENDED FROM THE UNDERSIDE OF THE PLATFORM. FIXTURES AND DEVICES SHALL BE SUPPORTED BY THE FINISH CEILING WITHIN LOAD LIMITS OF THE SUSPENSION SYSTEM. HEAVY FIXTURES AND "SAFETY" WIRES SHALL ATTACH TO THE UNDERSIDE OF THE PLATFORM. CEILING MOUNTED EQUIPMENT ITEMS SHALL BE SUPPORTED BY MEMBERS BEARING ON THE PLATFORM PURLIN. WHEN EQUIPMENT WEIGHTS EXCEED LOAD CAPACITY OF THE PURLINS, SUPPORT SHALL BE PROVIDED FROM BEAMS OR GIRDERS AT FLOOR.

1 ISOMETRIC OF SERVICE AND FUNCTIONAL ZONES
 NTS

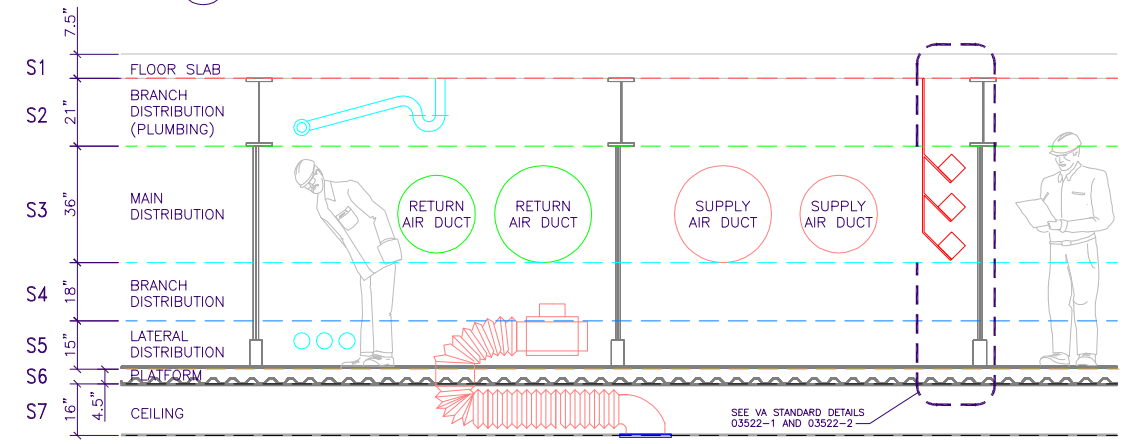
CONSULTANTS: 		ARCHITECT/ENGINEERS: 		Drawing Title ISOMETRIC OF SERVICE AND FUNCTIONAL ZONES AND GENERAL NOTES	Project Title SUPPLEMENT TO VAHBS REPORT	Project Number -	Office of Facilities Management
Revisions 		Approved Project Director 		Building Number VAHBS	Location STANDARD DETAIL	Drawing Number 00000-10	
Date 		Date JUNE 2006		Checked NCK	Drawn JLV	Deg. of 	



2 LONGITUDINAL SECTION THIS SECTION ILLUSTRATES A TYPICAL S-4 SUBZONE STRATEGY
NTS



3 TRANSVERSE SECTION THIS SECTION ILLUSTRATES A TYPICAL S-3 SUBZONE STRATEGY
NTS



4 SERVICE ZONE DETAIL
NTS

DRAWING INTENT:
TO DEPECT TYPICAL SECTIONS
ILLUSTRATING SERVICE ZONE
STRATEGIES.

INTERSTITIAL DIST. SUPPORT STRATEGY

SUBZONE	STRATEGY
S1	FLOOR THICKNESS INCLUDES 3" TOPPING SLAB TO ALLOW FOR INSTALLATION OF CERAMIC TILE, WATER PROOFING, SHOWER PANS, AND RECESSED EQUIPMENT. REFERENCE PG-18-3 TOPIC 6.
S2	SERVICE SYSTEM ELEMENTS IN THE S2 ZONE, SHALL BE SUSPENDED FROM THE UNDERSIDE OF THE FLOOR SLAB OR DECK.
S3	SERVICE SYSTEM ELEMENTS IN THE S3 ZONE SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE UNDERSIDE OF THE STRUCTURAL BEAMS. SUPPORTS SHALL BE SECURED TO THE BOTTOM OF THE BEAMS. SYSTEMS IN THIS ZONE ALSO MAY BE SUSPENDED FROM THE UNDERSIDE OF THE DECK. HOWEVER, USE OF THE DECK FOR SUPPORT SHOULD BE MINIMIZED.
S4	SERVICE SYSTEM ELEMENTS IN THE S4 ZONE SHALL BE SUPPORTED FROM THE PLATFORM PURLIN.
S5	SERVICE SYSTEM ELEMENTS IN THE S5 ZONE SHALL BE SUPPORTED FROM THE PLATFORM.
S7	SERVICE SYSTEM ELEMENTS IN THE S7 ZONE AS WELL AS FINISH CEILINGS SHALL BE SUSPENDED FROM THE UNDERSIDE OF THE PLATFORM. FIXTURES AND DEVICES SHALL BE SUPPORTED BY THE FINISH CEILING WITHIN LOAD LIMITS OF THE SUSPENSION SYSTEM. HEAVY FIXTURES AND "SAFETY" WIRES SHALL ATTACH TO THE UNDERSIDE OF THE PLATFORM. CEILING MOUNTED EQUIPMENT ITEMS SHALL BE SUPPORTED BY MEMBERS BEARING ON THE PLATFORM PURLIN. WHEN EQUIPMENT WEIGHTS EXCEED LOAD CAPACITY OF THE PURLINS, SUPPORT SHALL BE PROVIDED FROM BEAMS OR GIRDERS AT FLOOR.

GENERAL NOTES

- SERVICE BAY**
THE SERVICE BAY CONTAINS THE MECHANICAL, ELECTRICAL AND TELECOMMUNICATIONS ROOMS THAT SUPPORT A SERVICE MODULE AND SHAFTS AND RISERS NECESSARY FOR VERTICAL DISTRIBUTION OF SERVICES.
- SERVICE ZONE**
THE SERVICE ZONE EXTENDS HORIZONTALLY FROM THE SERVICE BAY AND CARRIES THE DISTRIBUTION OF SERVICES ABOVE THE FUNCTIONAL ZONE. ALL SERVICES DOWNFEED INTO THE FUNCTIONAL ZONE EXCEPT FOR GRAVITY DRAINS FROM THE SERVICES MODULE ABOVE.

THE SERVICE ZONE IS ORGANIZED INTO SUBZONES AND CHANNELS THAT DEFINE AND ORGANIZE THE SERVICE RUNS.

SUBZONES ARE HORIZONTAL LAYERS WITHIN THE SERVICE ZONE. MAIN SERVICE DISTRIBUTION RUNS FROM THE SERVICE BAY ARE ALL PARALLEL, EACH CONNECTING TO BRANCHES AT RIGHT ANGLES TO THE MAINS, AND BRANCHES CONNECTION, WHERE REQUIRED, TO LATERALS AT RIGHT ANGLES TO THE BRANCHES WITHIN THE DEFINED SUBZONES.

CHANNELS ARE PLAN DIVISIONS OF THE SUBZONES AND DEFINE RESERVED LOCATIONS FOR PARTICULAR SERVICES.

IN ORDER TO PRESERVE THE RIGHTSOF-WAY FOR INITIAL AND FUTURE INSTALLATION OF SERVICE RUNS, NO SHORTCUT OR POINT-TO-POINT ROUTING OF SERVICES IS PERMITTED. THIS IS EXTREMELY IMPORTANT.
- S1 SUBZONE - FLOOR SLAB**
THIS SUBZONE EQUALS THE DEPTH OF THE FLOOR FINISH TOPPING SLAB AND STRUCTURAL SLAB.
- S2 SUBZONE - BRANCH DISTRIBUTION**
THIS SUBZONE CONTAINS THE STRUCTURAL BEAMS, PRESSURE PIPING AND GRAVITY DRAINAGE AND VENTS.
- S3 SUBZONE - MAIN DISTRIBUTION**
THIS IS THE MAJOR SUBZONE AND IS RESERVED FOR MAIN DISTRIBUTION OF SERVICES THROUGH THE LENGTH OF THE SERVICE ZONE. IT IS DIVIDED BY SERVICE INTO CHANNELS. THE DEPTH WILL BE GOVERNED BY HVAC DUCT SIZES, CROSS OVERS OR SUPPLY, AND RETURN/EXHAUST DUCTS ARE TO OCCUR IN THE SERVICE BAY.
- S4 SUBZONE - BRANCH DISTRIBUTION**
THIS SUBZONE CONTAINS MECHANICAL AND ELECTRICAL BRANCHES AND VENTS. IT IS DIVIDED BY SERVICE INTO CHANNELS. DEPTH WILL BE GOVERNED BY HVAC BRANCHES.
- S5 SUBZONE - LATERAL DISTRIBUTION**
THIS SUBZONE TAKES THE FINAL SERVICE RUN TO THE LOCATION OF THE SERVICE DROP INTO THE FUNCTIONAL ZONE BELOW. ANY PROJECTIONS FROM THE WALK-ON PLATFORM CONSTRUCTION WILL BE PARALLEL TO THE SERVICES AT THIS LEVEL. FORMAL CHANNELS ARE USUALLY NOT DEFINED IN THIS SUBZONE.
- S6 SUBZONE - PLATFORM**
THIS SUBZONE EQUALS THE OVERALL DEPTH OF THE WALK-ON PLATFORM (INTERSTITIAL DECK) CONSTRUCTION.
- S7 SUBZONE - CEILING**
THIS SUBZONE EXTENDS FROM THE UNDERSIDE OF THE WALK-ON PLATFORM TO THE BOTTOM OF THE SUSPENDED, FINISH CEILING. LIMITED LATERAL DISTRIBUTION MAY OCCUR IN THIS SUBZONE SUCH AS OFFSETS IN SERVICE DROPS FROM THE PENETRATION THROUGH THE WALK-ON DECK TO FIXTURE OR PARTITION; FIXTURES AND DEVICES RECESSED IN THE FINISHED CEILING; SWITCH LEGS AND WHIPS FOR LIGHTING FIXTURES; FIRE SPRINKLER; AND NON-INTERGRATED TELECOMMUNICATIONS CONDUIT AND CABLING FOR PUBLIC ADDRESS, NURSE CALL, CATV/MATV SYSTEMS AND FIRE ALARM SYSTEM.

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Revisions	Date

CONSULTANTS:

ARCHITECT/ENGINEERS:

Drawing Title
TYPICAL SERVICE ZONE STRATEGY

Approved Project Director

Project Title
SUPPLEMENT TO VAHBS REPORT

Location
STANDARD DETAIL

Date
JUNE 2006

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Building Number
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Drawing Number
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Page
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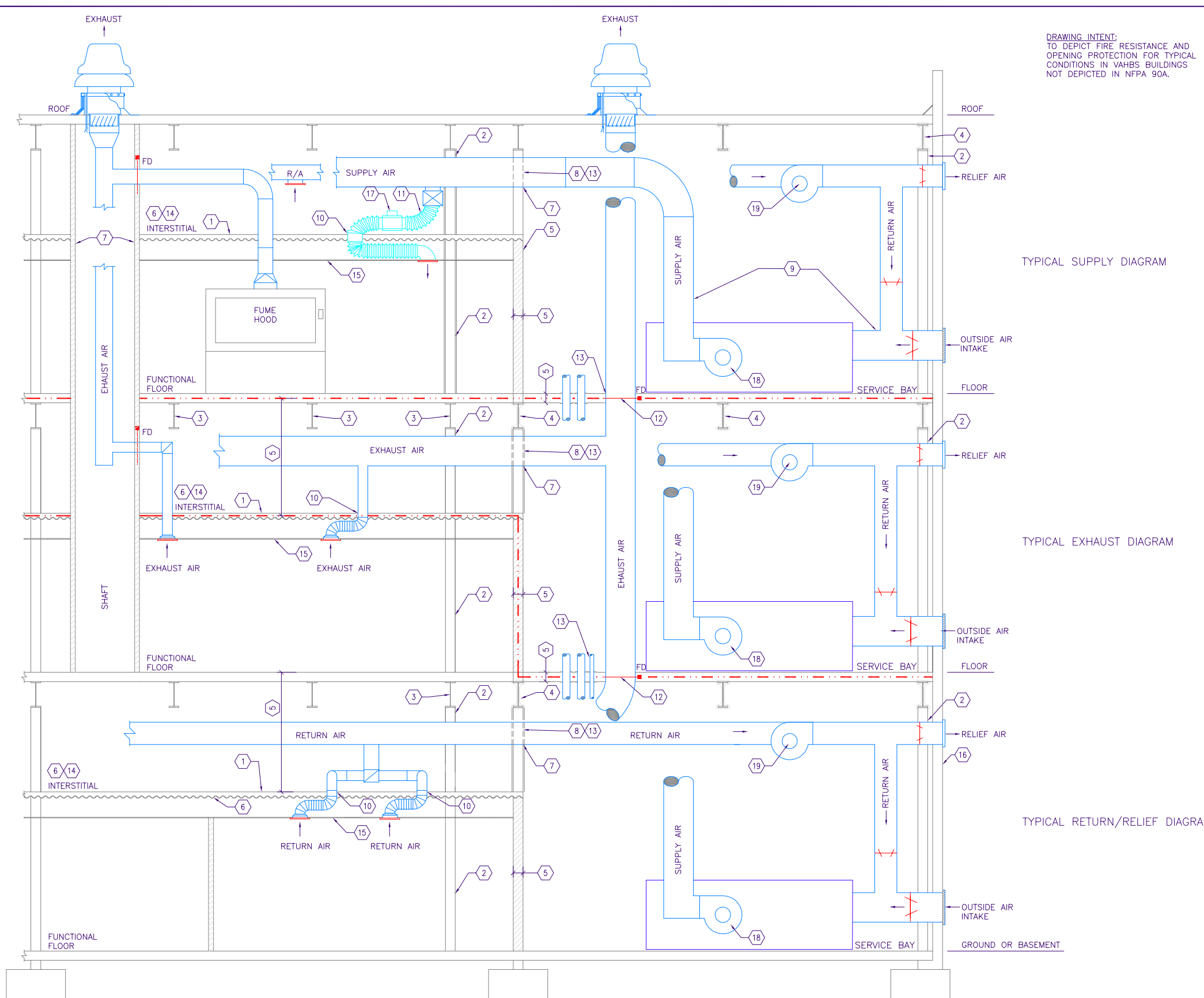
Office of Facilities Management

Department of Veterans Affairs

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SUBZONES IN INTERSTITIAL SERVICE ZONE, TYPICAL

S1
S2
S3
S4
S5
S6
S7



DRAWING INTENT:
 TO DEPICT FIRE RESISTANCE AND
 OPENING PROTECTION FOR TYPICAL
 CONDITIONS IN VAHBS BUILDINGS
 NOT DEPICTED IN NFPA 90A.

TYPICAL SUPPLY DIAGRAM

TYPICAL EXHAUST DIAGRAM

TYPICAL RETURN/RELIEF DIAGRAM

GENERAL NOTES

- | | |
|--|---------------------------|
| 1. DESIGN FIRE RESISTIVE RATINGS TO COMPLY WITH NFPA 220 AND IBC | VA FP DESIGN MANUAL 2.1.A |
| 2. DESIGN CONSTRUCTION TYPE TO COMPLY WITH MOST RESTRICTIVE OCCUPANCY GROUP IN BUILDING. | 2.1.B |
| 3. PROVIDE FIRE ALARM PULL STATIONS AT EXIT DOORS FROM INTERSTITIAL SPACES AND SUFFICIENT NOTIFICATION DEVICES IN INTERSTITIAL. | 2.2.H |
| 4. PROVIDE EXIT SIGNS AT EXIT DOORS AND OTHER LOCATIONS AS REQUIRED TO PROVIDE CLEAR DIRECTION. | 2.2.I |
| 5. PROVIDE EMERGENCY LIGHTING FOR EGRESS ILLUMINATION IN FUNCTIONAL ZONE, SERVICE BAY, AND INTERSTITIAL. | 2.2.J |
| 6. FLEXIBLE DUCT WITHIN SUBZONES S-4 OR S-5 SHALL BE LIMITED TO 3 FEET FOR EACH RUN. FLEX DUCT WITHIN SUBZONE S-7 SHALL BE LIMITED TO 5 FEET. RETURN/EXHAUST SYSTEM PLENUMS ARE NOT ALLOWED. | |
| 7. LOCATE OR PROTECT OUTSIDE AIR INTAKE(S) IN ACCORDANCE WITH VA PHYSICAL SECURITY CRITERIA. | |

KEY NOTES

- | | |
|---|---------------------------|
| 1. WALK ON DECK (PLATFORM) PER NBSIR 85-3158 OR NISTIR 5560+FP DESIGN MANUAL. | VA FP DESIGN MANUAL 2.2.A |
| 2. STEEL COLUMN - FIRE PROOF FULL HEIGHT CONCRETE COLUMN - PROVIDE MINIMUM COVER TO FIRE PROOF REINFORCING STEEL. | 2.2.B |
| 3. STRUCTURAL MEMBERS SUPPORTING FUNCTIONAL FLOOR SHALL NOT BE FIRE PROOFED; EXCEPT COLUMNS SHALL BE PROTECTED FULL HEIGHT. | 2.2.B |
| 4. STRUCTURAL MEMBERS SUPPORTING MECHANICAL ROOMS OR MULTIPLE FLOORS SHALL BE FIRE PROOFED. | 2.2.B |
| 5. 2 HOUR FIRE RESISTANCE RATING REQUIRED BETWEEN FLOORS:
HORIZ. FLOOR/"CEILING" INCLUDING INTERSTITIAL PLATFORM
VERT. WALL BETWEEN SERVICE BAY AND FUNCTIONAL ZONE
HORIZ. FLOOR BELOW MECHANICAL ROOM (SERVICE BAY). | 2.2.C |
| 6. INTERSTITIAL SPACE NEED NOT BE SUBDIVIDED INTO FIRE OR SMOKE COMPARTMENTS. CONSTRUCTION FOR HORIZ. EXITS OR SMOKE BARRIER WALL NEED NOT EXTEND ABOVE INTERSTITIAL PLATFORM. | 2.2.D |
| 7. FIRE RESISTANCE RATING REQUIRED IN INTERSTITIAL AT 2 HOUR SHAFTS AND WHERE 1 HOUR CONSTRUCTION IS PROVIDED FOR MECHANICAL ROOMS. | 2.2.E |
| 8. NEITHER FIRE NOR SMOKE DAMPERS REQUIRED AT PENETRATION OF 1 HOUR PARTITION AT MECH. RM. | 2.2.F |
| 9. PROVIDE SMOKE DAMPERS AT AIR HANDLER AS REQUIRED BY NFPA 90A. | 2.2.F |
| 10. FIRE DAMPERS NOT REQUIRED FOR OPENINGS IN INTERSTITIAL DECK LESS THAN 150,000sq. mm(225sq. in.) | 2.2.F |
| 11. FLEX DUCT (UL 181 CLASS 1) ALLOWED UP TO 2.4M (8 FT.); NO LARGER THAN 300mm (12 IN) DIA | 2.2.F |
| 12. PROVIDE FIRE DAMPERS (OR SHAFT CONSTRUCTION) AT DUCTS PENETRATING SERVICE BAY FLOORS PER NFPA 90A. | |
| 13. PROTECT HORIZONTAL AND VERTICAL PENETRATIONS (DUCTS, CABLES, CONDUIT, PIPES, ETC) WITH LISTED FIRE STOPPING SYSTEMS | 2.2.G |
| 14. FIRE SPRINKLERS NOT REQUIRED IN INTERSTITIAL SPACE; EXCEPT
A. SPRINKLERS REQUIRED IN ELECTRICAL CLOSETS, SIGNAL ROOMS, ETC IN INTERSTITIAL.
B. A SINGLE LINE OF SPRINKLERS IS REQUIRED ABOVE TRACKS OF ELECTRICAL TRACK VEHICLE SYSTEMS (ETVS). | 6.1.B.1 |
| 15. FINISHED (SUSPENDED) CEILING. | |
| 16. EXTERIOR WALL. | |
| 17. TERMINAL BOX. | |
| 18. SUPPLY AIR FAN. | |
| 19. RETURN AIR FAN. | |

Revisions	Date

CONSULTANTS:

ARCHITECT/ENGINEERS:

Drawing Title
**INTERSTITIAL SPACE
 FIRE RESISTANCE AND OPENING
 PROTECTION REQUIREMENTS**

Approved Project Director

Project Title
**SUPPLEMENT TO
 VAHBS REPORT**

Location
STANDARD DETAIL

Date
JUNE 2006

Checked
NCK

Drawn
JLV

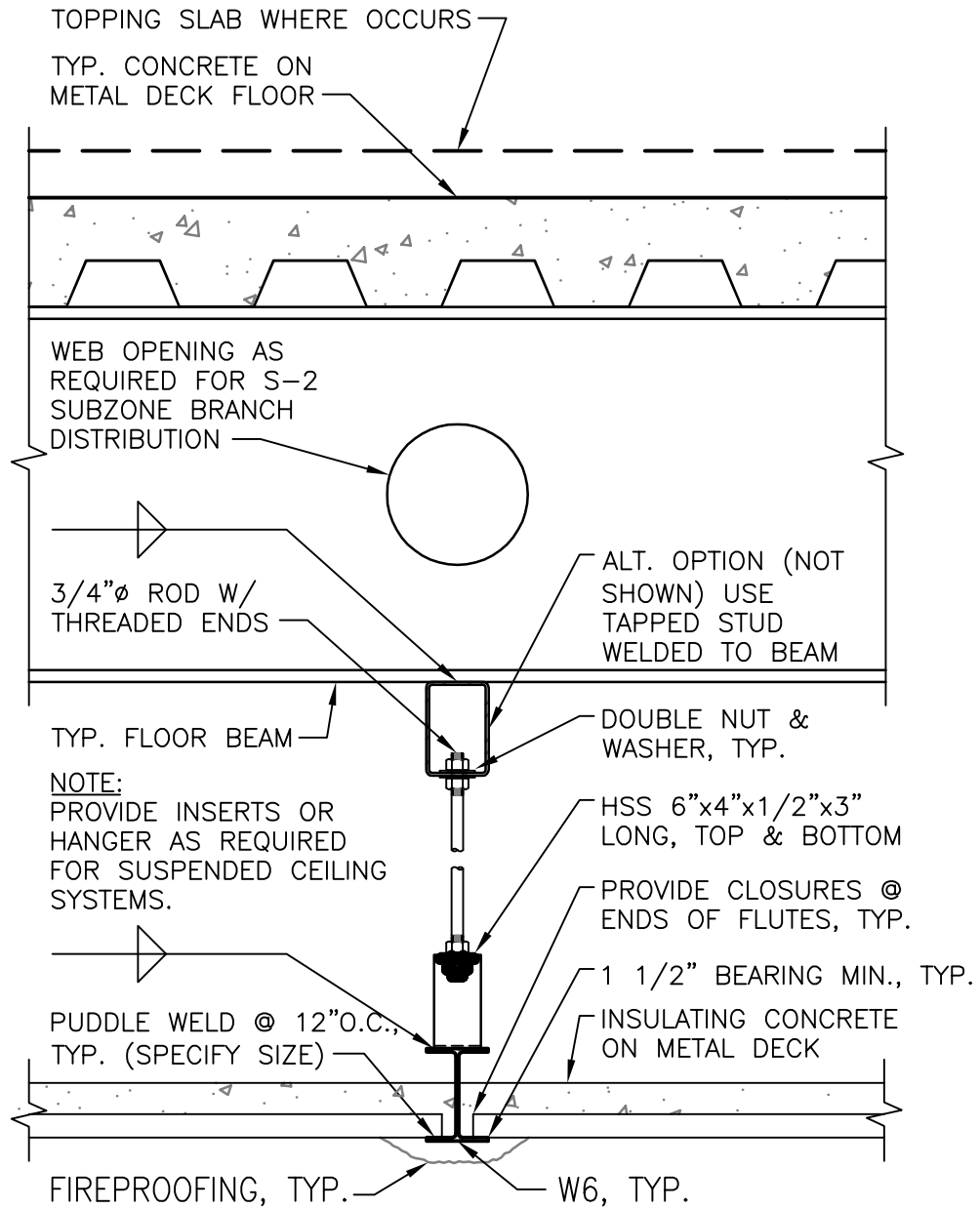
Project Number
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Building Number
VAHBS

Drawing Number
00000-12

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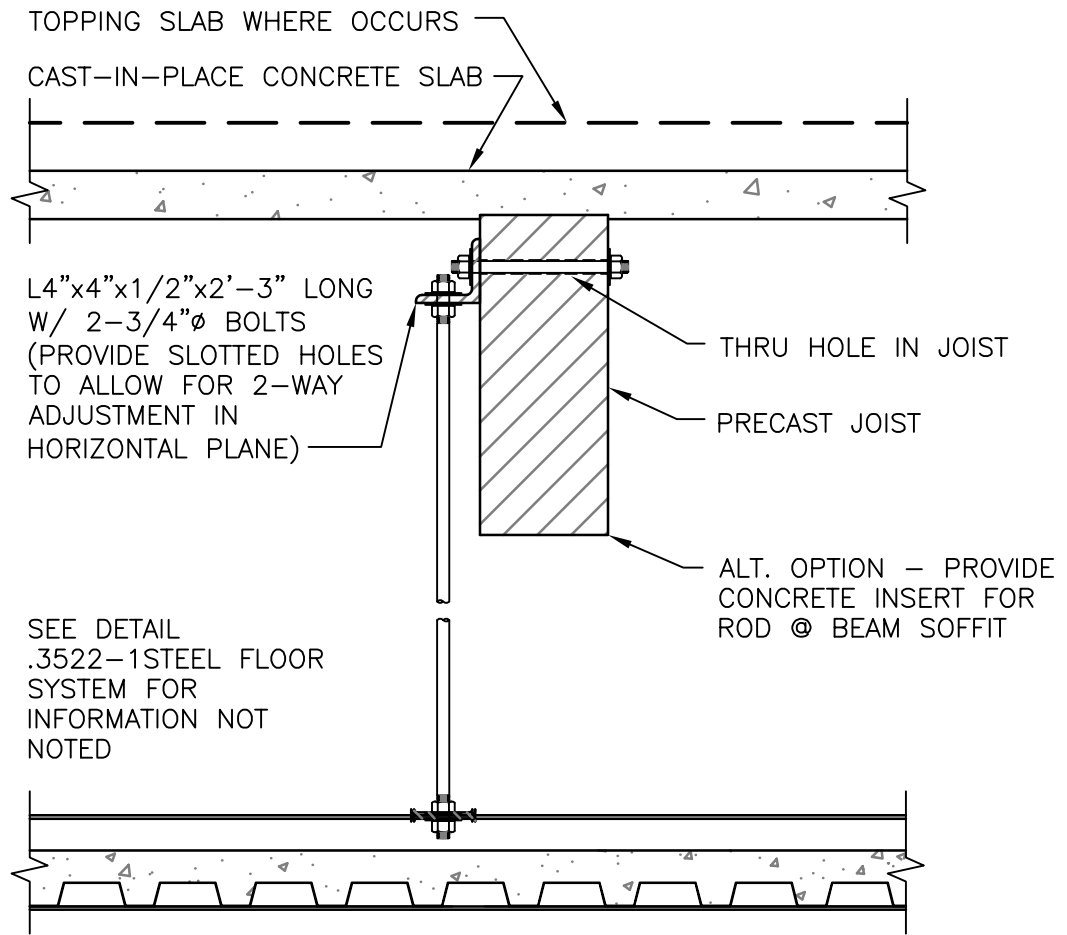
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