Activity Hazard Analysis (AHA) Example

Project Name: Construct Building 123	**Overall Risk Assessment Code (RAC) (Use highest code)**
Project Location: Naval Station ABC, Anytown, USA	**Risk Assessment Code (RAC) Matrix**
Contract Number: N00000-00-0-0000	
Date Prepared: 06-01-2011	
Prepared by (Name/Title): John Smith/ Safety Specialist	
Reviewed by (Name/Title): Mike Brown/ Safety and Health Manager	
Notes: (Field Notes, Review Comments, etc.)	

Severity	**Probability**				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart
E = Extremely High Risk
H = High Risk
M = Moderate Risk
L = Low Risk

Activity	Potential Hazards	Precautionary Action & Controls to be Taken	RAC
1. Fire Hydrant Flow Testing	1. Vehicular Traffic Incident	1A. Personnel must wear reflective vests. 1B. If lane closure is required in accordance with the approved traffic control plan, use traffic control devices such as signs or cones placed as needed. 1C. When possible, remain on sidewalks and beyond roadway curbs or shoulders.	M
	2. Hydrant operation	2A. Ensure water discharge will not flow into hazardous areas, i.e. trench work, electrical operations, etc. 2B. Ensure all fittings are firmly tightened into the hydrant.	

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
Fire Hydrant Flow Test Equipment	Inspection in accordance with NFPA 291.	Training in accordance with NFPA 291.

Date: [xxx]

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Contract Number: N00000-00-0-0000	**Severity**	**Probability**				
Date Prepared: 06-01-2011		Frequent	Likely	Occasional	Seldom	Unlikely
Prepared by (Name/Title): John Smith/ Safety Specialist	Catastrophic	E	E	H	H	M
	Critical	E	H	H	M	L
Reviewed by (Name/Title): Mike Brown/ Safety and Health Manager	Marginal	H	M	M	L	L
	Negligible	M	L	L	L	L

Notes: (Field Notes, Review Comments, etc.)

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

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Activity	Potential Hazards	Precautionary Action & Controls to be Taken	RAC
2. Commuting to Field Investigation.	1. Automobile accident	1A. Personnel observe all traffic regulations. 1B. Personnel must wear seat belts. 1C. Ensure that vehicles are maintained properly.	**M**

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements

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Notes: (Field Notes, Review Comments, etc.)	

Severity	**Probability**				
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Activity	Potential Hazards	Precautionary Action & Controls to be Taken	RAC
3. Soil sampling.	1. Exposure to chemicals and contaminated soil.	1A. Personnel performing soil sampling shall wear appropriate PPE (work clothes, steel toed shoes, chemical protective gloves). 1B. Avoid contact with soil. 1C. Eating, drinking, and smoking shall be prohibited in work area. 1D. Wash hands and face prior to leaving work area or as soon as possible.	**M**
	2. Trips, falls and cuts from vegetation and excavator holes.	2A. Watch for excavator holes. 2B. Remain aware of and look for loose vegetation. 2C. Do not rush or run.	
	3. Heat stress.	3A. Follow company heat stress program.	

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
Specific soil sampling equipment.	Personnel shall be training in applicable exposure hazards.	

Date: [xxx]

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Severity	**Probability**				
	Frequent	Likely	Occasional	Seldom	Unlikely
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Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

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Activity	Potential Hazards	Precautionary Action & Controls to be Taken	RAC
4. Field investigation – general exterior conditions.	1. Sunburn and dehydration.	1A. Use sunscreen. 1B. Use hat for head protection. 1C. Carry water and drink water frequently.	M
	2. Insect bites.	2A. Carry insect repellant and use as needed.	
	3. Poisonous plants.	3A. Avoid contact with any plant fitting the descriptions of poisonous plants. 3B. If affected, wash the skin with soap and water immediately.	

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
Specific field investigation equipment.		

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Catastrophic	**E**	**E**	**H**	**H**	**M**
Critical	**E**	**H**	**H**	**M**	**L**
Marginal	**H**	**M**	**M**	**L**	**L**
Negligible	**M**	**L**	**L**	**L**	**L**

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

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Activity	Potential Hazards	Precautionary Action & Controls to be Taken	RAC
5. Field investigation – electrical	1. Electrocution/shock.	1A. Take precautions to avoid contact with energized components of equipment. Ensure required Logout/tagout procedures have been completed. 1B. Personnel shall wear appropriate PPE.	**M**

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
Specific field investigation equipment.	Training in accordance with NEC and Electrical Safety Field Guide (OPNAV P-45-117-6-98).	Inspect work area in accordance with NEC and Electrical Safety Field Guide (OPNAV P-45-117-6-98).

Date: [xxx]

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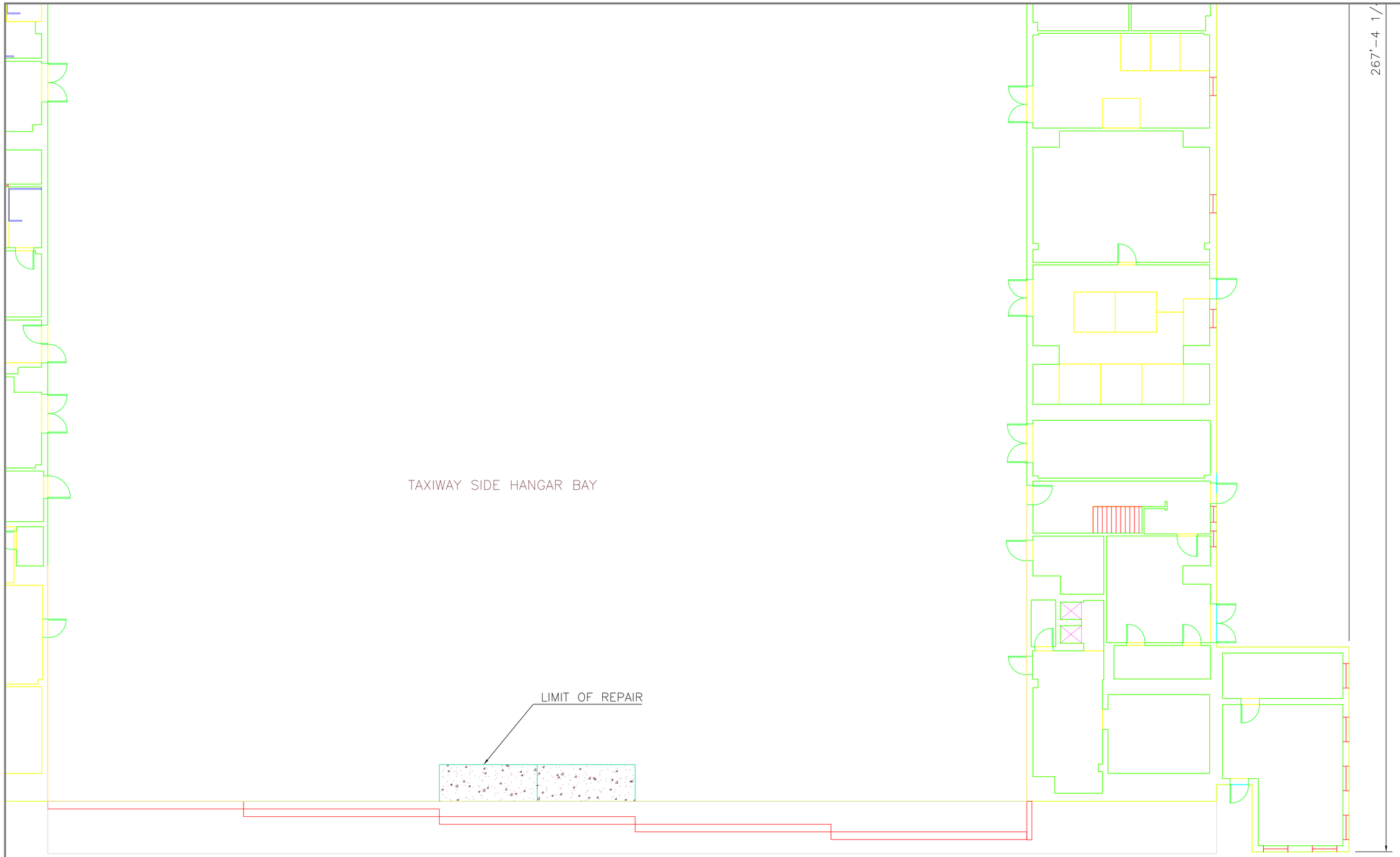
Activity	Potential Hazards	Precautionary Action & Controls to be Taken	RAC
6. Field investigation – roofing inspection.	1. Trips, slips or falls.	1A. Personnel shall wear appropriate PPE. 1B. Always watch your footing. Use a slower pace if conditions warrant. 1C. Use required/appropriate fall protection equipment.	**M**

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
Specific field investigation equipment. Specific fall protection equipment.	Training in accordance with EM 385-1-1 Safety and Health Requirements Manual, 29 CFR 1926.500 (Subpart M) -- FP in Construction, ANSI Z359-2007, and 29 CFR PART 1910 – Occupational Safety and Health Standards-General Industry.	Prior to field investigation, inspect work area in accordance with EM 385-1-1 Safety and Health Requirements Manual, 29 CFR 1926.500 (Subpart M) -- FP in Construction, ANSI Z359-2007, and 29 CFR PART 1910 –Occupational Safety and Health Standards-General Industry.



Hangar 305, Replace Hangar Slabs
1182986

Attachment 1

0 2' 4' 8' 16'
1/8" = 1'-0"

FOR OFFICAL USE ONLY

DEPARTMENT OF THE NAVY
PATUXENT RIVER
Naval Air Warfare Center
Aircraft Division
PATUXENT RIVER, MD 20670-5409

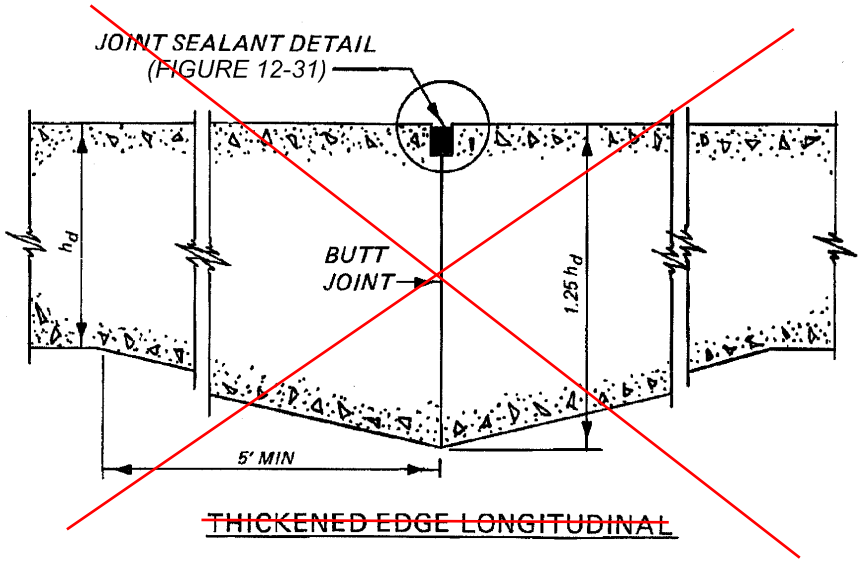
NAWCAD 7.10
Infrastructure Business
Operations Department
47440 Emory Road
Building 506
Patuxent River, MD 20670
(301) 757-1700

LEGEND
Each Space Identified With:
SPACE TYPE
SPACE ID
ORGANIZATION CODE

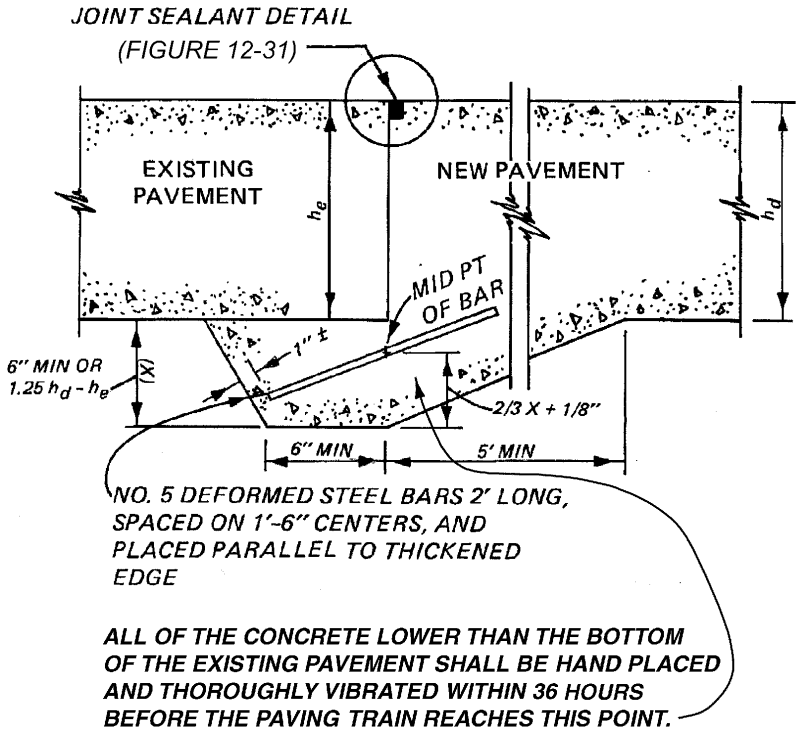
SUBMISSIONS/REVISIONS

NO.	DATE	ACTION/REMARKS
1	02/00	UPDATE, REVISED / MWF
2	03/01	UPDATE, REVISED / JSW
3	12/02	UPDATE, REVISED / KMM
4	01/09	ADDED ROOM LEVEL / JSW
5	05/09	SCALE DWG. / ARS
6	08/09	ADDED BUILDING 2115 / JSW
7	10/09	REN. TAXI SIDE / ARS, KMM
8	04/10	UPDATE DRAWING / KYM

DATE DWN: XX/XX/XX
DWN BY: SAS
CKD BY: XXX
CADD FILE: n00421_patuxe_305a_fpf1
SCALE: 1/16"=1'-0"
ORGANIZATION: NAWCAD PAX. RIVER, MD.
BUILDING NAME: HANGER, A/C MAINTENANCE
BUILDING NO.: 305
FLOOR: FIRST FLOOR



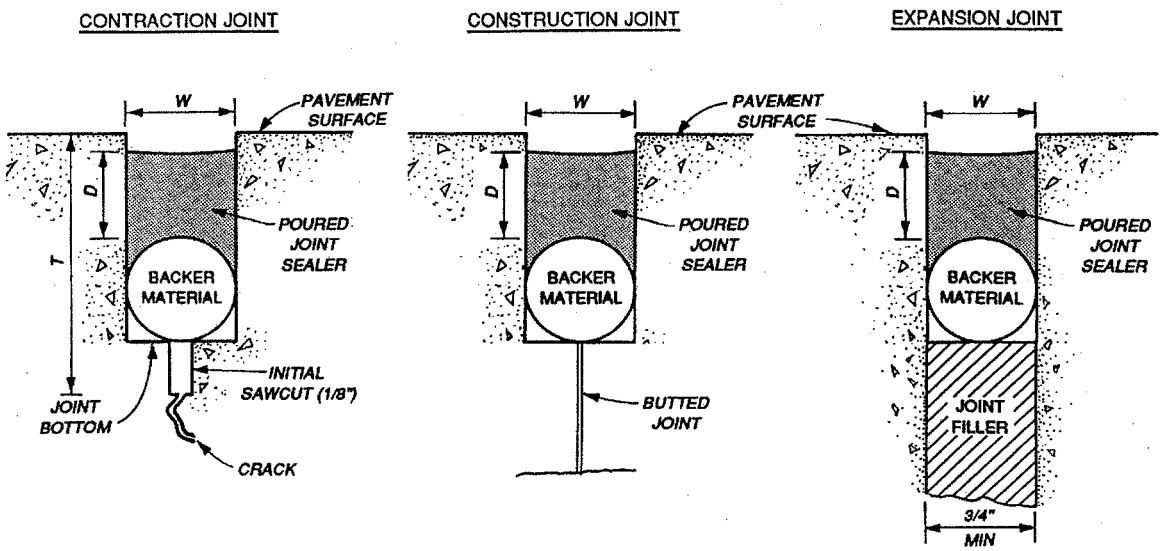
~~THICKENED EDGE LONGITUDINAL~~



SPECIAL JOINT BETWEEN NEW AND EXISTING PAVEMENT
TRANSVERSE OR LONGITUDINAL

CONVERSION FACTORS

MILLIMETERS = 25.4 x INCHES
METERS = 0.3048 x FEET



W = WIDTH OF SEALANT RESERVOIR (SEE TABLE)
D = DEPTH OF SEALANT (1.0 TO 1.5 x W) FOR POURED SEALANT; 0.5 W FOR SILICONE SEALANT
T = DEPTH OF INITIAL SAWCUT TYPE JOINT FORMER (CONTRACTION JOINT)

a. 1/4 SLAB THICKNESS ± 1/2" FOR PAVEMENTS LESS THAN 12 INCHES
b. 3 INCHES FOR PAVEMENTS 12-18 INCHES*
c. 1/6 SLAB THICKNESS FOR PAVEMENTS MORE THAN 18 INCHES*
d. DIAMETER OF BACKER MATERIAL = W + 1/8"

TABLE

JOINT SPACING FT	WIDTH, IN.	
	MIN	MAX
20	1/2	5/8
20 (NAVY)	3/8	--

*DESIGNER MAY WANT TO CONSIDER REQUIRING 1/4 SLAB THICKNESS

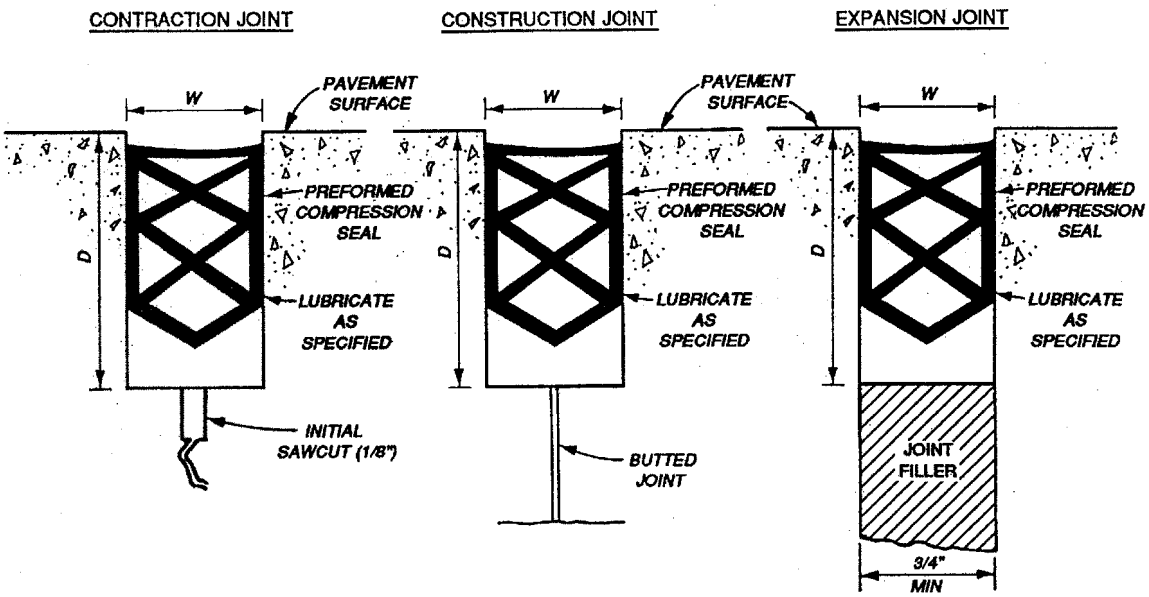
NOTE: TOP OF SEALANT SHALL BE 1/4-IN. TO 1/16 IN. BELOW TOP OF PAVEMENT. IN AREAS TO BE GROOVED, THE JOINT SEAL SHALL BE RECESSED BELOW THE DEPTH OF THE GROOVES.

CONVERSION FACTORS

METERS = 0.3048 X FEET
MILLIMETERS = 25.4 X INCHES

POURED JOINT SEALANT DETAILS (BACKER MATERIAL)

PREFORMED COMPRESSION SEAL



NOTE: DEPTH AND WIDTH OF UNCOMPRESSED SEAL SHALL BE AS RECOMMENDED BY MANUFACTURER, EXCEPT THE DEPTH SHALL NOT BE LESS THAN 1.5 INCHES.

TOP OF PREFORMED SEAL SHALL BE 1/8 TO 1/4 INCH BELOW THE PAVEMENT SURFACE. IN AREAS TO BE GROOVED, THE JOINT SEAL SHALL BE RECESSED BELOW THE DEPTH OF THE GROOVES.

COMPRESSION SEALS MUST BE IN COMPRESSION AT ALL TIMES.

JOINT SPACING FT	WIDTH, IN.	
	MIN	MAX
20	1/2	5/8
20 (NAVY)	3/8	--

CONVERSION FACTORS

METERS = 0.3048 X FEET
MILLIMETERS = 25.4 X INCHES

JOINT SEALANT DETAILS (PREFORMED COMPRESSION SEAL) FOR RIGID PAVEMENT

Hangar 305, Replace Hangar Slabs
1182986